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Gentlemen: I gratefully appreciate the honor of my election to the Presidency of this important Section of the British Medical Association, which I regard as a compliment to the Dublin School of Midwifery, with which I have been long connected, rather than to an individual otherwise so unqualified for the distinction as myself. I shall therefore trust to your continued indulgence for condonance of whatever shortcomings may be observable in my attempt to discharge the duties now entrusted to me.

The present meeting of the Association should, I think, be especially valued by the members of this Section, for it is to Scotland, and to the genius of her sons, that the twin sciences of obstetrics and gynecology—which we are here met to cultivate—owe their earliest development in Great Britain; and to a large extent their recent progress is traceable to the same source.

Long before there was any systematic teaching of midwifery either in Dublin or in London, and fully twenty years before the foundation in the former city of the great maternity hospital—on the staff of which I served my apprenticeship to the obstetric art—a Professorship of Midwifery was, in 1725, established in the University of Edinburgh, and I have had in my possession the ancient manuscript notes of the obstetric course delivered there in 1756 by Professor Young, as well as of the lectures of Dr. Hamilton, by whom he was succeeded. From that time the obstetric teaching of the Scottish schools has come down in an unbroken continuity of excellence to our own day, and its character has been amply maintained by the reputation of their *alumni*. Thus it was to William Smellie, a native of Lanarkshire, that our professional forefathers owed a "System of Midwifery" as far in advance of any that had preceded it as the obstetric science of these last twenty years of the nineteenth century has progressed beyond that taught in 1752 by Smellie. To the same writer is more especially due the credit of the first real improvement on Chamberlen's original forceps, as well as directions for using that instrument, as he said, "on rational and mechanical principles," which even yet might be studied with much advantage by modern obstetricians.

It was in this country also that the mind of William Hunter received its early training in that obstetric art which he afterwards so successfully cultivated and practised in London, and of which he there became the most distinguished of all its older British teachers. Nor even in this brief retrospect can it be forgotten that in the city wherein we are now assembled, modern intraperitoneal gynecological surgery was first anticipated in 1701 by Dr. Houstoun, in the curative treatment of an ovarian tumor by abdominal section. Whilst more than a century later it was to another Caledonian surgeon—Mr. Lizzars, of Edinburgh, whose early ovariotomy cases were published in 1856—that the revival, although in a very different and improved form, of Houstoun's first laparotomy operation is mainly due. I shall not attempt to follow further the long history of the obligations of our art to the older Scottish schools, or pause to offer my humble tribute of respect to the memory of one of their ablest teachers—the late Sir James Simpson, whose name will be recalled as long as suffering humanity seeks relief in anesthesia, and as long as obstetrics and gynecology are cultivated, Nor need I here refer to the services to our branch of medicine of Dr. Matthew Duncan, who filled the position I now occupy at the last meeting at Edinburgh of this Association, or allude to the well-recognized gynecological work of Dr. Keith and of many other no less distinguished living Scottish authorities.

Whilst willingly acknowledging how much we owe to Scotland, I cannot omit a briefer reference to the similar labors of the Dublin School, although the credit of not a few of the obstetric advances that originated there in bygone years has more recently been elsewhere appropriated. Thus, for instance, the employment of version as a substitute for craniotomy as advocated by some modern German and English writers, was first suggested in 1752 by Sir Fielding Ould, the second Master of the Dublin Hospital, and was revived a century later in the same place by the late Dr. M'Clintock, whose genius, erudition, and obstetric skill entitle him to remembrance even in our most oblivious of professions. In like manner the management of the third stage of labor by the method claimed as his own in the late Dr. Spiegelberg's recently translated "Text Book of Midwifery," is practically almost identical with that followed in the Rotunda from time immemorial, as described several years ago in my edition of "The Dublin Practice of Midwifery." The resuscitation, moreover, of the use of the forceps, the prophylaxis of *post-partum* hemorrhage, and many other improvements in the management of child-birth and the puerperal state—the introduction of which is claimed elsewhere —have, I may repeat, also emanated from the same practical school of midwifery.

The foregoing reference to the historic claims of the ancient Scotch and Irish centres of obstetric science might be readily expanded. Time, however, forbids my further trespassing either in this way or by any allusion to the better known services of the early fathers of English midwifery; as Raynald, Willoughby, Harvey, Cook, Chamberlen, Chapman, Giffard, Denman and the host of other pioneers of obstetric knowledge, many of whose lives and labors are so well chronicled in Dr. Aveling's erudite "Biographical Sketches of British Obstetricians." I shall, therefore, devote the remaining portion of this address to the more practical consideration of the results of some of the recent developments of obstetric and gynecological science.

Progressive Improvement of Midwifery Practice.—The progressive improvement of midwifery practice has been strikingly evinced during the past few years. Thus the pathology and preventive treatment of intrauterine death and abortion have been freed from much of their former obscurity and difficulty by the recent writings of Dr. Priestly. The prevalence of puerperal septicemia, by epidemic outbursts of which, in my early days, I have repeatedly seen the crowded wards of a great maternity hospital decimated, has been largely diminished by the hygienic and antiseptic measures now adopted for its prevention. Whilst if septicemia should still occur, we are now armed with more scientific means for the curative treatment of this disease which some years ago was generally classed amongst the incurable *opprobria* of our art. In like manner, by the adoption of improved methods for the prevention and treatment of *post-partum* hemorrhage, that once frequent source of obstetric mortality has been almost completely removed. At the same time, the throes and pains of labor have been rendered more endurable by the employment of comparatively safe anesthetics, such as the mixture of two parts of ether and eau de Cologne with one of chloroform, which for nearly twenty years, I have found a generally efficient and agreeable anesthetic in such cases. Moreover, by judicious instrumental assistance, we may now, in many instances, safely abridge the duration of that formerly often long-protracted period of paturient suffering, which, when a student, I have too often seen allowed to continue unrelieved for forty and fifty, and even for eighty, hours and upwards. Lastly, the former appalling frequency of child-destroying operations has been reduced in an exact proportion to the increasing employment of the forceps. Nor have the limits of the utility of this instrument, as a substitute for the cephalotribe, craniotomy forceps, cranioclast, *et hoc genus omne*, been even yet fully reached.

The Uses of the Forceps and its Improvement.—The reason why any embrotomic instruments are still included in the the ordinary obstetric outfit, appears to me the fact that most midwifery practitioners do not recognize sufficiently the compressive power of the long forceps, and, moreover, rely exclusively on some one form of forceps, whether the head be above or within the pelvic cavity, and without reference to the kind of mechanical power—tractile, lever or compressive—that may be specially required in each case. Desirable as it may be to carry as few implements as possible in the obstetric bag, it is, nevertheless, impossible to combine in any one instrument properties so distinct as those referred to. In operative midwifery there should, surely, be some definite proportion between the power employed and the resistance to be overcome. Hence it seems about as needless to resort to an instrument of such compressive and lever power as the double-curved long forceps, to assist delivery in an ordinary case of delay in the second stage, as it would be to employ a steam-hammer to crack a walnut.

Recent Progress of Gynecology.—The development of this branch of medicine since our Association last met in Scotland, has been still more remarkable than that effected in the practice of midwifery during this period. Thus, for example, only a few years ago many of the most frequent forms of endouterine and periuterine disease were beyond the diagnostic and remedial reach of gynecologists, then unprovided with those means of rapidly and thoroughly dilating the cervical canal, or with the many other methods of direct investigation by the aid of which any well educated practitioner may now recognize and treat endouterine, ovarian, tubal and other intraperitoneal and pelvic complaints that baffled detection or treatment. Nor in those pre-antiseptic days could have been anticipated the wonderfully successful results since realized from laparotomy operations, and more especially ovariotomy, as well as from some still more recent developments of intraperitoneal surgery in tubal and other diseases, including even peritonitis and cancer of the uterus, the latter a subject which has been recently elucidated in Dr. J. Williams' Harverian Lectures. In the last named cases, however, it is a debatable question whether we should persevere further with the intraperitoneal procedure for the removal of the uterus introduced by Freund, in view of the better results obtained from the vaginal method advocated by Dr. Martin, of Berlin; and also whether in the latter case the operation should be limited, as recommended by Dr. Williams and Dr. Brathwaite, to the removal of the cancerous portion, and not be extended to the extirpation of the entire uterus.

Only within the time referred to has the general correctness of Dr. Graily-Hewitt's views with regard to the importance and treatment of uterine displacements and flexions become commonly accepted. Neither were the symptoms and appropriate treatment of ovarian displacements understood until a more recent period, when attention was directed to them by Dr. Barnes' able paper on this subject in the *American Journal of Obstetrics*, and in a minor degree, perhaps, also by a memoir of mine on the same topic in the transactions of the Irish Academy of Medicine. Nor is it so long since the bearing of cervical lacerations on pelvic pathology, as first demonstrated by Dr. Emmet, of New York, first became recognized in this country. Finally, the diagnosis, importance and curability of diseases of the uterine appendages, such as hydro and pyosalpinx, together with several other causes of female suffering and death, were, in like manner, practically ignored by gynecologists until within a very recent period.

Influences of Prejudice and Fashion on Gynecological Progress.—In the history of many of the successive developments of gynecology just referred to, we may observe proofs not only of the progress of our art, but also of the two cause which have temporarily retarded its advancement. The first is the opposition generally offered in matters medical, as in most others, to all innovations, and the consequent reaction by which the pendulum of professional opinion is swung from one extreme to the other, exaggerated over-estimation, thus generally succeeding to earlier adverse prejudices. The second is the potent influence of fashion on medical opinion and practice; for, strange as it may be why this should be the case, it is, nevertheless, true, that—

> "In physic, as in fashion, we find
> The newest is ever the rage of mankind."

This is strikingly illustrated in gynecological practice, in which it now seems almost as much the fashion to ascribe various obscure female complaints to ovarian and tubal disorders, as, a few years ago, it was to attribute similar ailments to uterine flexions and displacements; or as, ten years earlier, it was the mode to credit them to chronic inflammation, or what was then regarded as ulceration of the neck of the womb; or yet, a century previously, to set them down, in the phraseology of our professional ancestors, to "the spleen" or "the vapors."

Gynecological Specialism and Woman's Place Therein.—In this connection I may venture to observe that I cannot agree with those who are opposed to the admission of women into the practice of our department of medico-chirurgical science for which their sex should apparently render them so especially adapted. I can see no valid reason why any well qualified practitioner, male or female, should not be welcomed amongst us. Nor if there are women who prefer the medical attendance of their own sex, does it seem fair that in this age of free trade they should not be afforded every opportunity of exercising their discretion in a matter so personal to themselves. For my own part, I greatly doubt that, in these countries at least, "The Lady Doctors" (as they are termed) will ever replace the ruder sex in the general estimation of their sick sisters. But, if not here, elsewhere there is unquestionably an ample field for female practitioners, and, more especially, in India and other Oriental countries, where millions of suffering women and children are fanatically excluded from the possibility of any other skilled professional assistance; and I therefore think that such practitioners are entitled to admission into our ranks in the British Medical Association.

Laparotomy in Relation to Gynecology.—Foremost amongst the proofs of modern gynecological progress, the most signal is that afforded by the results of abdominal surgery in the treatment of ovarian tumors, as demonstrated in countless cases at home and abroad and in this country more especially in the practice of Sir Spencer Wells, Dr. Keith, Mr. Lawson Tait, Dr. Bantock, Dr. Savage, Mr. Thornton, and other specialists in this department of operative surgery, which, not very many years since, was so loudly and unfairly decried. Whether this should encourage the present frequency of resort to laparotomy in the various other intraperitoneal morbid conditions in which it is now advocated, or not, is however, another question, and one which, I think, may be still advantageously reconsidered.

Treatment of Fallopian Tube Diseases.—With respect to the tubal diseases, to the operative treatment of which so much attention is now devoted, and which I have elsewhere fully discussed, I shall only here again observe that, whilst recognizing the fact that in some instances of pyo-salpinx and hydro-salpinx the removal of the diseased uterine appendages affords the only available means of treatment, and fully appreciating the surgical skill by which operations for this purpose have been brought to their present perfection, I have not, in my own experience, found laparotomy operations as generally necessary in such cases as they are apparently now deemed by others. On the contrary, I am confirmed by increasing observation, in the belief that in some instances these tubal diseases, more especially in cases of hydro-salpinx, may terminate favorably without any surgical treatment, and, moreover, that in other cases such collections, whether purulent or serous, may be evacuated by cautious aspiration through the vaginal roof. Very recently I had an opportunity of again proving the advantages of this method of treatment in the case of a lady, who after many months of suffering, was sent to me from a distant country to have the affected uterine appendages removed, but whom I succeeded in relieving of her trouble, with the assistance of my friend, Dr. Duke, by aspirating the Fallopian tube, and thus removing about ten drachms of serous fluid from the distended duct. I would, therefore, still urge the expediency of a fair trial of other less serious methods of treatment before resorting to the extirpation of the uterine appendages in these cases generally.

Operative Treatment of Uterine Tumors.—It would be impossible within the limits of this address, to enter at length into the consideration of a question so large and so controversial as the general necessity for surgical interposition in the treatment of uterine fibromata. This, I am glad to see, will be brought before you during this meeting by those eminently qualified to speak on the subject; and I trust that in the ensuing discussion new light may be thrown on the comparative merits of the various intraperitoneal and vaginal surgical procedures advocated in such cases, as well as on the value of electrolitical treatment. Nor, in this connection, should the possibility of arresting the growth of these tumors in some instances, by appropriate medical treatment, as well as the greater probability of thus effectively checking hemorrhage so occasioned, and more especially by the free administration of ergot and iodide of potassium, to which I have elsewhere called attention, be entirely lost sight of.

With regard to the former, or surgical method, I may, however, venture to repeat that, in the majority of cases of interstitial and subperitoneal uterine tumors, no active treatment whatever appears to me essential, inasmuch as such growths seldom, if ever, destroy life, and in many cases become arrested in their development and quiescent in their symptoms at the menopause, or may even possibly disappear altogether in the course of time. The latter event is, however, far too exceptional to have much influence in determining the expediency of surgical treatment, and more especially that by öophorectomy, which is unquestionably called for in the case of fast-grown fibroids, giving rise to otherwise uncontrollable urgent hemorrhagic or pressure troubles, particularly when occurring in young patients.

With regard to hysterectomy, although exceptional cases may occur in which this procedure is necessitated, the average mortality that has followed its performance, is such as to forbid its general employment, as an operation of election, in a disease, the average mortality of which, when left to nature, is so comparatively insignificant. Whilst as to myotomy, in view of its too common results, I can only repeat that it would appear to me a method by which a patient may be effectually removed from a tumor, rather than as an operation by which a tumor can be safely removed from a patient.

Treatment of Uterine Fibroids by Electricity.—Although I have so nearly exhausted the allotted limits of this address, I cannot omit a few words in reference to the latest and most promising of the methods available in the treatment of uterine fibromata—namely, that by electricity. Within the past year and a half, I have had occasion to try this method in some ten instances, in my hospital and private practice; and so far as the arrest of hemorrhage is concerned, the result was most satisfactory, the bleeding being thus arrested in six of these cases. But with regard to the cure of the disease from this treatment, the possibility of which had been demonstrated in the experience of Dr. Apostoli and others, who had employed it on a much larger scale, I can only say that whilst I have not as yet seen the complete subsidence of the tumor effected in any of the cases so treated by myself, in three of them its apparent bulk became distinctly diminished even after six weeks or two months treatment of this kind. It should, perhaps, be added that in all these instances I used Dr. Apostoli's original plastic clay abdominal electrode, the current used being, of course, monopolar and acting directly on the growth by the intrauterine pole, and was obtained from a powerful Leclanche battery of an estimated maximum current strength of 250 milliampères. In the first of my cases I employed the electrolytic negative current, but after a little experience I abandoned this, and in the subsequent trials used only the positive current, which, although non-energetic as a galvano-caustic, is far less liable to give rise to trouble, and from its decided hemostatic action is more suitable to these cases of large hemorrhage producing tumors, in which alone this or any other active treatment seemed to me generally necessary.

If, however, the results obtained by Dr. Cutter, and, still more conspicuously, those recorded by Dr. Apostoli, from the employment of electricity—namely, permanent benefit in ninety-five per cent. of the cases of fibromata thus treated by him—should be confirmed, as I hope may possibly be the case by the experience of those who are here about to discuss this disease, then we might well congratulate ourselves on having at last arrived within sight of the long sought for safe and effectual curative treatment of uterine tumors.

The foregoing *rêsumê* of some of the recent developments of obstetric and gynecological science, imperfect as it is, affords a sufficient vindication of our branch of medicine from the aspersions which have been poured upon its followers. These advances and their results are surely more than enough to show that those by whom so much has been accomplished are engaged in no narrow specialism; but, on the contrary, should rank high in that noble and ever progressive profession of medicine whose great objects are the prolongation of life and the relief of every form of human suffering.

In conclusion, gentlemen, it only remains for me to again thank you for the honor you have here conferred upon me and for the patience with which you have listened to this address.

CASES OF EPILEPSY IN CHILDREN.

By Angel Money, M. D.,
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T. M——, aged 6 years, was brought to me for curious "fits." The fits repeated themselves several times daily. It was my good fortune to witness, on separate occasions, three attacks. Very probably there was no loss of consciousness; the conjunctival reflex was not in abeyance; the pupils dilated equally on the two sides; neither the bladder nor the rectum were ever emptied during or in connection with a fit; the tongue had never been bitten.

The "fit" was solely composed of clonic spasms, unattended and certainly not preceded by tonic spasms. The clonic spasms always began in the face, then affected the arm and lastly the leg, all on the right side of the body, never on the left; the tongue did not seem to participate in the movement. The spread of the spasm from part to part was very rapid; the total duration of the attack was fifteen seconds; the phenomenon known as "facial irritability" was well marked on both sides ot the face. The knee jerk on the right side was weaker than that on the left immediately after the fit, but in the intervals, though both knee jerks were ready, the right was more marked. The grasp of the right hand was weaker than the left.

Seen first in June, 1883. The mother said that the spasms had been worse since the scarlet fever, two months before. The father suffers much from nervousness and night terrors; the father's sister had had fits and the father's mother was hysterical, and the father's sister's child had epilepsy. The child herself is fond of being alone, reads a great deal, requires a great deal of attention, and, if not answered at once, the fits are said to be brought on. My own belief is, that the child's requiring an immediate answer is merely the expression of a state of nerve tension in the mental centres, preceding a similar state of the motor centres of the gray matter of the cortex. On October 26, 1885, the notes state that the child sings after an attack, and that the eyeballs jerked to the right in one attack, but there did not appear to be any loss of consciousness.

The treatment consisted in half drachm doses of bromide of ammonium on alternate nights, then ten grain doses three times a day. January 4, 1886, liquor arsenicalis and tincture of belladonna were prescribed, because the fits still continued. During a catarrh, in March, the fits were said to be more numerous. On April 15, 1886, the notes state that the fits had entirely disappeared three weeks ago. The facial irritability was still marked, and there was occasionally twitching of the fingers of choreoid character; the pulse intermitted every tenth beat. In October, 1887, these twitchings were still present, and also the facial irritability, but no further fits had been observed. She slept well and there was no jumping of the limbs before getting to sleep. After the next winter the choreoid twitching had disappeared and the patient had not been seen since.

In the next case epilepsy was accompanied by chorea, and after a time the former replaced the latter.

L. C——, aged 10 years, was first seen on September 9, 1886. Her illness began four days previously and very suddenly, with twitchings in the hand, leg and face, but only on the right side of the body. There were no rheumatic accompaniments. She was treated by massage of the whole body, and recovered in six weeks. On February 6, 1887, she was again attacked, and this time she frequently suffered from attacks of giddiness, after which her head ached and she became very drowsy. Diplopia was a marked symptom about February 15, 1887, doubtless due to the chorea. In the attacks of giddiness consciousness was frequently lost, the face blanched, the pupils dilated; the pulse remained steady, but was slowed from 72 to 60 beats per minute; the spasms were not apparently altered any way.

Writing with a blunt point on any part of the skin of the body, but especially on the arm of the right side, was followed by a beautifully defined red tache. Occasionally the written characters were white with red borders (*vide Lancet*, Vol. II, 1887, paper by myself). This case was treated with many drugs, but picrotoxin appeared to be most useful.

THE PNEUMATIC CABINET AND ITS USE IN THE TREATMENT OF PULMONARY DISEASES.

By Albert Abrams, M. D., San Francisco.

Read before the San Francisco County Medical Society.

The benefits derived from mechanical means in the treatment of pulmonary affections, constitute one of the great achievements of modern therapeutics; and the pneumatic cabinet, by which many of these results are attained, has now become a permanent fixture of the physician's armamentarium. This instrument has survived the lapse of time, the most crucial test for an apparatus of science. The theories involved in the application of the cabinet and the truly brilliant results achieved, have not received just recognition—which fact also explains, aside from expense, its rather limited use by physicians. The literature on pneumotherapy has become so extensive, that no more than a brief *résumé* of the same can be accomplished in the limited time at my disposal.

With the cabinet we can influence diseases of the lungs, by the use of compressed or rarefied air and by topical medication. Apparatus for the treatment of diseases of the lungs by compressed or rarefied air were utilized long before the cabinet, as devised by Dr. Williams and Mr. Ketchum, was introduced but a few years ago to the medical profession. And while the instrument of the latter gentlemen represents no absolutely new method of treatment, its construction on the most approved principles of physics has accomplished much in making ærotherapy a recognized and successful method of treatment in thoracic diseases.

The main principle involved in the cabinet of Dr. Williams, is this: that the air which the patient breathes is of a different tension from that surrounding the body, and which is properly called the principle of pneumatic differentiation. Granting we have a patient on whom we desire to test the action of compressed air: After the patient enters the cabinet, which is practically an air-tight iron safe, about 5 feet high, 2 feet wide and 2½ feet deep, by a slow and regular movement of the air pump, we secure the requisite atmospheric rarefaction. The patient, now immersed in a rarefied atmosphere, will, when a stop-cock is opened, be breathing the outside air, which is relatively compressed air. This relatively compressed air when inhaled will expand the lungs, including in such expansion parts which are partially or completely collapsed. The effect, furthermore, will be to compress the pulmonary blood vessels and thus exsanguinate the lung tissue. These effects are purely mechanical, and we attain thereby, as observation has taught, an increase in the thoracic capacity from 25 to 100 per cent. and a corresponding development of chest measurements and expansion. The elasticity and contractility of the pulmonary tissue is improved, the respiration rendered less frequent and congestion, if present, is subdued. The objection usually cited in regard to the liability of creating hemorrhage by the use of compressed air, proves to be groundless, as ample clinical evidence will substantiate. The effect of this treatment is to increase the blood pressure in the large blood vessels and to decrease the pressure in the smaller arteries and capillaries of the lungs, so that the result would be to decrease the tendency to hemoptysis and even to arrest the same if it exists. Dr. Isaac Platt, of Brooklyn, New York, speaks of patients calling at his office, complaining of the sputa being blood-streaked, and almost without a single exception the use of the cabinet has relieved this symptom in the course of a few minutes. In advanced cases of phthisis where cavities exist, the latter are occasionally traversed by blood vessels, and it is in such instances that hemorrhage may occur by the use of the instrument; but inasmuch as such unprotected blood vessels will surely rupture in the course of time, any premature rupture is but an anticipation of a certain event. As a rule, however, we can attribute to compressed air a hemostatic action. I have never looked upon a moderate amount of hemorrhage from the lungs as a serious complication, but as having rather a salutary effect—it is, as it were, an expression of relief from a congested organ. The antihyperemic action of compressed air would suggest its use in pneumonia during the stage of engorgement or at any time prior to exudation. I am not aware, however, that the cabinet has ever been put to such use.

There are also chemical effects secured by the use of compressed air, viz: by the increased introduction of oxygen into the system, on the principle that the inspired volume of compressed air contains more oxygen than a like volume of rarefied air. The chemical action is evidenced by an increase of the appetite, muscular power and body weight.

Thus far we have succinctly considered the mechanical effects of compressed air, and were this the only action effected by the use of the cabinet, it would prove sufficiently valuable as an agent of therapeutics. By such action we effect a most thorough ærial *lavage* of the respiratory apparatus and expel the residual air which always stagnates in the remote parts of the lungs. The air is a most thorough scavenger of the respiratory apparatus, provided the same does not suffer any material reduction in the amount of its oxygen. The air impinging on every part of the lungs is an adequate guarantee of absolute disinfection. Whether this action is germicidal, or whether it is effected by mechanically dislodging and promoting the expulsion of the phagocytes which have consumed the microbes, we are not in a position to argue. But this much is evident, that the lungs can only remain healthy, provided they receive the necessary ærial nutrition. To speak of air as a disinfectant in connection with the apparatus of respiration, might engender the ridicule of the bacteriologist; but this is a clinical, not a laboratory fact. Among the many reasons adduced why tuberculosis more frequently attacks the apices than any other part of the lungs, one, above all others, is entitled to consideration, viz: that the apices move less on respiration than the other parts of the lungs; or, expressed in language more explicit, the air supply to the apices is not only small in volume, but furnished less frequently than are the other pulmonary districts, and inasmuch as we consider the ærial to be equivalent to the vascular nutrition, the apices represent the points of least resistance.

The pathologist who is constantly engaged in the making of necropsies is surprised why so few people die of pulmonary tuberculosis, so frequently does he encounter lesions referable to this affection. Probably all people who have attained adult life have had, at some time, tuberculosis. If the pathologist were to rely on the tabulation of his statistics, on microscopical as well as macroscopical examination of the pulmonary apices, the preceding statement would not be considered in the light of exaggeration. When we learn that the tidal or breathing volume of the air amounts to only 25 cubic inches, and that the complemental air, which is the air taken into the lungs by forced breathing, which, in addition to the tidal volume, amounts to about 100 cubic inches, and knowing that the average respiratory capacity of an adult is about 225 cubic inches, the conclusion is evident that even in a state of health the lungs are imperfectly ærated. Any prolonged quiescence of a part destined by nature to activity, serves as a favorable nidus for the invasion of disease. When a patient presents himself to us for treatment with a family history of phthisis and in whom we have every reason to believe, by the configuration of the thorax and general *habitus*, that there exists a predisposition to pulmonary tuberculosis, in obedience to older methods, we would at once proceed to nourish his body, hoping thereby to avert disease. A more rational procedure in such a case would be to primarily concentrate our forces on the poorly developed pulmonary apparatus, allowing the development of the body to be secondary to this. To accomplish the latter procedure the pneumatic cabinet is eminently fitted, and as a prophylactic in just such cases is entitled to the utmost consideration.

Another advantage claimed for the pneumatic cabinet is that of topical medication, which is accomplished while the patient is confined in the rarefied atmosphere and breathing the outside air which enters the lungs charged with a medicated solution. In inhaling fluids which have been atomized under ordinary atmospheric pressure the resulting vapor in consequence of rapid condensation does not go beyond the larynx or trachea, as proved by observation. If, however, the patient is surrounded by a rarefied atmosphere and breathing air under relative compression charged with vapor, the same will penetrate to the ultimate air cells. We will not follow the ingenious argument of Mr. Ketchum tending to demonstrate this fact. There is ample reason to believe that, in the majority of instances, the spray does not condense beyond the primary division of the bronchi, but, granting that it did go to the ultimate alveoli, what good would it accomplish, let us say, in tubercular deposits? Here the *bacilli tuberculosis*, the pathogenic microbes of this disease, are inclosed in an impenetrable material, and even though subjected to the direct action of the spray, the latter would prove inefficacious as a germicide.

In my limited experience with the pneumatic cabinet, the same good effects were observed in the treatment of bronchitis and phthisis, notwithstanding in many instances the spray was eliminated. I believe that the topical medication, notwithstanding the opinion of Dr. Williams to the contrary, is subservient to the mechanical action as achieved by this instrument in the treatment of pulmonary diseases. The cabinet has exerted the most pronounced good in chronic as well as acute bronchitis. Acute bronchitis is usually an affection of limited duration and readily yields to almost any form of medication, but there are cases which prove obstinate and in just such cases the remarkable effects of the cabinet can be elicited. In the few cases at my disposal I have observed after a single sitting the relief of the so-called constriction, together with the dyspnea complained of by the patient and the appearance of profuse expectoration. In these cases no demand was made for a second sitting, the distressing symptoms after a single application having disappeared. The use of compressed air as an expectorant in acute bronchitis is very manifest.

In dispensing with the spray, I have done so for experimental purposes only, and would not deny any good effects from the same in bronchitis, provided the latter were confined to the larger bronchi. In capillary bronchitis, atelectasis of the lower and posterior parts of the lungs frequently occurs and prompt relief can be afforded the collapsed portions by the use of the cabinet. We must likewise remember the relief afforded in acute bronchitis to the congested blood vessels, the inspired air acting under such circumstances as an astringent In chronic bronchitis we may attribute to the cabinet almost a specific action as the results of numerous observers show.

In the treatment of pulmonary tuberculosis by the pneumatic cabinet instances of cure have been reported in recent as well as in advanced cases. All observers admit the relief afforded the dyspnea, expectoration, pyrexia, etc., in this disease. No absolute reliance can be placed on the reported cases cured by the cabinet treatment. Recovery from phthisis as witnessed at the *post-mortem* table is often a spontaneous phenemenon. It is difficult to tell whether the reported cures were solely due to the action of the cabinet or by means of other treatment which was carried on simultaneously. The diagnosis of the cases reported was not corroborated by an examination of the sputum to determine the presence or absence of the bacilli tuberculosis and elastic fibres. The complete recovery of the patient could only be confirmed when, after repeated examinations of the sputum, no tuberculous bacilli could be found. No dependence can be placed, for scientific purposes, on the statement of the patient. Any improvement must be controlled by thermometrical observation, quantitative estimation of sputa, weighing, etc.

It is a curious fact noted by the nurse in the phthisical ward of Prof. Hirschfelder at the County Hospital, that when the temperature is moderately high in phthisical individuals, the latter feel comparatively well, but when a remission of temperature occurs, this feeling of comfort is supplanted by that of dejection. The explanation of this phenomenon is difficult. A moderate degree of pyrexia is stimulating; if high, anesthetic; but perhaps an explanation based on the biology of the bacilli peculiar to this affection would prove more rational. The bacillus of tuberculosis, as shown by Koch, thrives at temperatures between 37° and 38° C., but its growth ceases at temperatures above 41° C. Perhaps the fever has a sanitary effect, that of limiting the multiplication of the bacilli.

The reliance placed on physical signs is likewise apt to mislead in noting improvements in phthisical patients after cabinet treatment. I refer particularly to those portions of the lung which formerly elicited a dull note on percussion and which are now supplanted by pulmonary resonance. We know full well that after the use of the cabinet an emphysematous condition of the lung is likely to be provoked, particularly when the atmospheric rarefaction is too pronounced. Emphysema will develop in those parts least resistant to the inspired current of air. The parts adjacent to tuberculous infiltration represent the points of least resistance. It is the resonance over the emphysema thus developed artificially, which masks the dullness of the parts below. The good effects remarked in phthisis after the use of the cabinet, are undoubtedly due to mechanical action, viz., dilatation of collapsed portions of the lung, readmittance of air, and the expulsion of products due to retrograde metamorphoses. We are cautioned by a few observers against the occurrence of emphysema after the cabinet treatment in phthisical cases. A moderate emphysema can exist without doing any great amount of harm. In developing an artificial emphysema we are but anticipating the designs of nature, for we are increasing the respiratory area in order to make good the deficiency caused by parts of the lung which are collapsed and functionless. A compensatory emphysema thus induced will account for the great relief furnished dyspneic individuals.

I do not remember ever having made a necropsy on an adult without finding pleuritic adhesions, and if these adhesions are the products of inflammation, then pleuritis is the most frequent of thoracic affections. Pleuritis, especially pleuritis sicca, affects circumscribed portions of the pleura and often exists without attracting any attention during life. I will not enter into a discussion on the changes which these adhesions may undergo, how they may involve the integrity of the lung, increase the work of the heart and do any amount of harm, but will consider only the practical side of the question. Patients often come to us complaining of "stitches in the side," and we dismiss them usually after recommending counter irritation, believing that we have only to deal with pleurodynia or intercostal neuralgia. The occasional persistence of these pains, however, tax our ingenuity, and we yield to despair. These so-called "stitches" are, in a number of instances, undoubtedly of pleuritic origin occasioned by the formation of adhesions which break down when any undue exertion calls for increased activity on the part of the respiratory apparatus. We have here a condition somewhat analogous to that which occurs in joints—an ankylosis, which, in this instance, I will call an *ankylosis of the lung*. To destroy these ankyloses constitutes the only indication for treatment, and I know of no method by which this can be more readily and certainly effected than by the use of the pneumatic cabinet.

To intensify and concentrate the action of the inspired air on certain parts of the lung, I make frequent use of an ordinary Martin's elastic rubber bandage, with which I encircle certain parts of the chest which I desire to exclude as far as possible in the respiratory act. I will illustrate my meaning by taking a case of incipient phthisis. I wish to concentrate all activity on the apices, and in order to do so I encircle only the base of the thorax, leaving its upper part free. In cases of emphysema the difficulty experienced by patients in breathing is at the time of expiration. By introducing such patients into a rarefied atmosphere we only increase the difficulty. To treat such cases rationally, the pneumatic cabinet is provided with an ingenious mechanism, which permits the operator at will either to rarefy the air within the cabinet, or to condense it to a given degree, or alternately to rarefy and condense it. In emphysema we may rarefy the air within the cabinet with the act of inhalation, condensing it with the act of exhalation; this is a method with which I am not familiar. I have encircled the entire chest of emphysematous patients by means of the rubber bandage, securing thereby what is most needed, a difficulty in inspiration and facilitating the act of expiration. In resorting to the ordinary method of treatment with the pneumatic cabinet, by removing the external pressure of the atmosphere from the chest walls, the active and passive movements of the respiratory act are reversed. There is a forced, involuntary inspiration, followed by a forced, voluntary expiration. In ordinary breathing, the act of inspiration is accomplished by some effort, while expiration is involuntary and passive. The act of expiration while the patient is immersed in rarefied air, proves to be exceedingly tiresome and incomplete. This difficulty, I have found, may be obviated to a certain extent by the application of the rubber bandage. The rubber bandage may likewise prove a valuable adjunct to this form of treatment, when we are desirous of concentrating our forces on an atelectatic portion of a lung, or on a circumscribed pleuritic adhesion. In conclusion, let me remark that I have considered but a few of the many uses to which this apparatus may be put.

My experience with the pneumatic cabinet has been limited, and it is only with the hope that I may be able at some future meeting to present a more elaborate and trustworthy report, that I ask your kind indulgence for this rather incomplete paper.

112 Mason street.

MEMORANDA.

Unusual Injury to the Eye by a Billiard Cue; Impaction of the Tip.

On the evening of the 4th of July some young men were enthusiastically celebrating the national holiday under the influence of alcoholic stimulation, when a disagreement arose over a game of billiards. In the altercation M. F—— was struck with the small end of a billiard cue, the point passing between the left eyeball, which it grazed, and the internal wall of the orbit, lacerating the lids, conjunctiva, etc. When first seen, three days afterwards, the lids were greatly edematous, the lacerated wound partially united, the cornea hazy and slightly ulcerated; vision very defective; the eye was somewhat prominent, and there was a purulent, watery discharge from the wound. The appearance of the eye indicated the presence of a foreign body, but the young man was sure there was none present, as he "had fallen upon a picket and had noticed that nothing broke off!" Probing the wound gave vent to some pent up pus, but a foreign body could not positively be made out. The wound was irrigated with bichloride solution, and cold water dressings and leeches were applied. After two days' treatment the condition of the eye was markedly worse than at the beginning, and I determined to search more thoroughly for a foreign body. The wound was enlarged and dilated with a pair of dressing forceps. After much uncertainty I finally decided that I could feel some extraneous substance. This was grasped with a sharp toothed forceps and drawn slowly through the original wound. Considerable force was required to extract what proved to be the leather tip of a billiard cue, greatly swollen. It measured about two-thirds of an inch in diameter and one-third in thickness. When confronted with this evidence the patient confessed to the circumstances of the accident. The eye began to improve soon after the operation under atropine, iodoform, bichloride solution, etc. Little vision, however, will be restored, as a leucoma covers a large portion of the cornea. The failure to detect so large a foreign body in the orbit was partially due to the young man's persistence in insisting that he was positive there could be none in it and the resemblance of the thoroughly softened leather tip to tissues, for which it was at first mistaken.

Sacramento, Cal. WM. ELLERY BRIGGS, M. D.

A Peculiar Bullet Wound.

A. A—— was returning from a deer hunt with his cousin, riding in an ordinary driving cart, with two rifles lying muzzles out in the bottom of the cart. The horse becoming frightened turned the cart partly over, causing one of the rifles, a Winchester, to slip out, butt first The hammer struck on the wheel, and the rifle was discharged within a few inches of the right thigh. The ball entered the thigh about three inches above the knee joint, on the posterior side, and came out three or four inches higher up on the anterior, passing outside of the femur. It then passed up to the clavicle, which it shattered; passing on upwards and backwards breaking the right transverse process of the third cervical vertebra; thence around to the left side, lodging just under the skin at the base of the skull. The brachial plexus was injured, causing pain in the right hand and paralysis of the right arm. From the first the wound in the neck appeared to be doing well; but the wound in the leg, and the shock of the discharge of the rifle and burning from the powder, destroyed the vitality of the whole thigh. Phlebitis set in, and there being no complete reaction from the shock, the boy died on the eleventh day of combined shock, sepsis, and the general inflammation occurring with the phlebitis. The point at which the ball made its exit from the thigh was lacerated, and the muscles everted over a space of four or five inches. From the ignited clothing, fully one-third of the thigh was badly burned. The most remarkable point in connection with the accident was that, considering the course of the ball, death was not immediate.

FRANK K. SAXE, M.D.

San Jose, Cal.

DEPARTMENTS.

OBSTETRICS, GYNECOLOGY AND PEDIATRICS.

By WALLACE A. BRIGGS, M. D., Sacramento, Cal.

The Action of Antipyrin on the Uterus.—At the July session of the Sociedad de Biologia, DR. CHOUPPE reported two cases, in which enemas of antipyrin had given excellent results in the relief of painful uterine contractions. At the November session he reported a third case, in brief, as follows: X—— carries a large uterine myoma, accompanied by profuse hemorrhage, which is easily controlled by ergot, whose use, however, gives rise to severe colic. Morphine relieves the pain, but renders the uterine contractions less energetic and the hemorrhage returns. Antipyrin by enema relieves the pain without causing the return of hemorrhage. Whence Dr. Chouppe concludes: (1) Antipyrin quiets pain due to uterine contractions produced by ergot. (2) Its action is directed to the element of pain and in no wise diminishes the strength of uterine contraction. DR. ORTIGOSA relates a similar experience in a case of abortion in the fifth month. The first enema of 2 gm. relieved the pains somewhat, and the second very notably, while the contractions continued regular and efficient. Dr. Ortigosa concurs in the conclusions formulated by Dr. Chouppe.—*El Progreso Gynecologico*, March 10, 1888.

Cauterization and the Curette in the Treatment of Endometritis.—For nearly forty years PROF. PAJOT has practised intrauterine cauterization in the various forms of endometritis. Twenty-five years ago he renounced intrauterine injections on account of their seeming danger. Since that time he has used silver nitrate in saturated solution, in powder, in paste; acid nitrate of mercury; anhydrous nitric acid; chloride of zinc: perchloride of iron; the thermo-cautery and the actual cautery. This he has done daily and without a single death. Four times only has he observed serious accidents, and then in imprudent patients. He never operates, however, while either the uterus or its surroundings are tender. He adopts the antiseptic method in "its full rigor," and cleanses the uterine cavity with the utmost care, so as to get the caustic in actual contact with the mucous membrane instead of its secretions. After thorough cauterizations of the cavity, he makes a large antiseptic irrigation and keeps the patient abed—four or five days after ordinary cauterizations and fifteen or twenty after severe ones. In the choice of a caustic, he follows the therapeutic principle of proportioning the nature, the energy and dangers of the remedy to the form, inveteracy and gravity of the disease. With proper precautions accidents are rarely observed after cauterization, even with the actual cautery. The curette is of value in relatively rare forms of endometritis. More women will be killed by it, and then it will take its place with the uterine repositors, formerly so much in vogue.—*Annales de Gynecologie*, June, 1888.

New Operation for Repair of Lacerated Perineum.—With the patient in either the lithotomy or the Sims' position, the left index finger is introduced well into the rectum and a long, straight, double-edged bistoury is made to pierce the tissues in front of the anus, at right angles to the vulva, and, guided by the finger in the rectum, is made to penetrate the septum for 2½ inches upward, the incision being enlarged laterally, as the knife is withdrawn, to two inches at least. The two points of incision being pressed together from side to side, a lozenge-shaped opening appears, and, when all the sutures required have been introduced, properly adjusted and approximated, the two cut surfaces are brought into direct apposition. Sutures are introduced by a strong cycle-shaped needle, with eye in point, mounted on handle, strong silver wire being the suture preferred. The needle is introduced at centre of skin incision below, and, guided by the finger in rectum, is made to travel over cut surface to its full extent above, describing the arc of a circle, and on the point of the needle appearing directly apposite is threaded with suture and drawn through. On the ends of this suture being pulled together by the fingers, a good idea can be formed of how many additional stitches may be required. When all considered necessary have been introduced and approximated, a finger of each hand passed into the rectum and vagina, respectively, will at once recognize the gain in thickness of septum, the external tissue being pushed forward fully an inch from the anus and forming a solid perineal body. The advantages of this operation are: (1) The simplest of performance as yet proposed; no danger of hemorrhage, the surfaces being brought together at once, wound dry and clean. (2) No danger of sepsis, as the incision is not open for the admission of any discharge from either vagina or rectum during healing process. (3) No loss of tissue, consequently no harm done should operation fail.—ALEXANDER DUKE, F. K. Q. C. P., in *Medical Press and Circular*, May 9, 1888.

Puerperal Fever and Erysipelas.—In a report to the Académie de Médicine, DOYEN presented the conclusion that erysipelas and puerperal fever are mutually causative. In this conclusion Cornil concurred, although hesitating to admit that the streptococcus is the only bacterium that causes puerperal accidents. Widal concluded that: (1) So far we have discovered no characteristic distinguishing the streptococcus of puerperal fever from that of erysipelas, and it is impossible for the experimenter to distinguish one from the other. (2) The streptococcus pyogenes produces different forms of infection, and the polymorphism of the lesions caused by it is one of the most interesting points of its history.—*Progrès Médical*, June 2, 1888.

The Cause of Abortion and Premature Labor in Febrile Diseases.—The fetus, says DR. BOLUMBURU, requires an abundant supply of oxygen, as Zweifel has demonstrated. If the mother's blood is despoiled of it, asphyxia of the fetus is imminent. This occurs in variola, with high fever, double pneumonia, etc. In fever, premature labor coincides with an excess of carbonic acid, which, through the blood, coming in contact with the uterine muscles, excites them to contraction. The higher the temperature, the greater the production of carbonic acid, and, consequently, the more rapid the labor.—*El Progreso Gynecologico*, June 10, 1888.

Chloral in the Vomiting of Pregnancy.—DR. SAINT MARC believes that chloral has a direct and special influence on the contractility of the stomach. He has witnessed striking benefit from its use in the vomiting of stomach vertigo, and latterly in severe cases of the vomiting of pregnancy. He administers it by the stomach in gm. (15 grain) doses, immediately followed by food.—*Gazette de Gynécologie*, June, 1888. [I have obtained marked amelioration of the vomiting of pregnancy by rectal injections of 1½ to 2 gm. (22 to 30 grains) of chloral and regard this as the preferable mode of administration.—W. A. B.]

The Bacterium of Whooping Cough.—The following conclusions of a careful investigation are presented by DR. SSEMTSCHENKO: (1) The bacterium of Prof. Afanassjew is specific. (2) It is to be found in the sputa from the fourth day on, and possibly earlier. (3) As it increases in number the disease grows worse. (4) It disappears before the entire subsidence of the paroxysms of coughing. (5) A complication—*e. g.*, catarrhal pneumonia is accompanied by a remarkable increase in the number of bacteria. (6) The pneumonia of whooping cough is essentially different from any other known form of pneumonia. This bacterium possesses significance not only in etiology and diagnosis but also in prognosis.—*St. Petersburger medicinische Wochenschrift*, June 16, 1888.

Drugs Conveyed to the Infant by the Nurse's Milk.—PROF. FEHLING finds that all soluble matters pass from the blood through the milk to the child. Sodium salicylate, which greatly increases the flow of milk, becomes dangerous to the infant after a dose of 3 gms. Potassium iodide is excreted slowly and may be given in the quantity of .2 of a gm. daily without harm to the child. Potassium ferrocyanide seems not to be excreted by the mammary glands at all, while on the contrary, iodoform is excreted very freely and is eliminated in abundance by the kidneys of the infant and very slightly or not all by the kidneys of the mother. The mercurial salts are not discoverable in the milk. Citric acid, mineral acids and vinegar seemed to have no influence either on the milk or the child—the former maintaining its normal alkalinity during the experiment. Fehling thinks, therefore, that the mother should be permitted to resume her usual diet as soon as she has recovered from her confinement. Twenty-five drops of tincture of opium (German Pharm.), may be given the mother without affecting the child. Morphine by subcutaneous injection may be used in .01 to .02 gm. doses (1/6 to 1/3 gr.) and chloral in 1½ to 3 gm. doses (22 to 46 gr.) with safety to the child—especially if the breast be withheld for 1½ to 2 hours after their administration. Atropine, however, must be used with great care, as it is very easily transmitted to the child by the mothers' milk, even the pharmacopeal dose producing a marked effect in this way. A moderate rise in the temperature of the mother does not affect the child, but a high temperature in the former, especially if sustained, soon produces a corresponding fever in the latter. This fact is explained by the experiments of Bumm, who found mastitis micrococci in the cellular tissue of the mamma in the mother's milk and in the alimentary canal of the child. In septic conditions, erysipelas and scarlatina after confinement, the specific micrococci are to be found as widely distributed. In these cases Fehling advises separation of mother and child and artificial food or a wet nurse for the latter. In other cases the child should be kept to the mother's breast.—*Medical Press and Circular*, May 9, 1888.

SURGERY.

By T. W. HUNTINGTON, B. A., M. D., Surgeon Southern Pacific Company's Hospital, Sacramento, Cal.

Treatment of Thecal Inflammation.—In a paper entitled "The Causes, Effects and Treatment of Tension, as met with in Surgical Practice," BRYANT writes as follows upon the above topic: Let me draw an illustra- of the effects of tension from inflammation of a deep structure, bound down by inelastic tissues, such as is met with in a familiar example of thecal inflammation. What pain is at once experienced here from the first onset of the trouble, and how rapidly it intensifies! What destruction of tissues follows! And what comfort and rapid recovery ensue if the case be rightly treated. These facts are familiar to us all, and yet I am rash enough to say that I am somewhat in doubt as to whether the generality of surgical practitioners realize their full meaning and so conform their treatment to the exigencies of the case as to give their patient the best chance of recovery. It is a primary surgical duty in such cases as these to relieve tension by giving vent to pent up fluids in distended tissues, and that this practice cannot be applied too early, may safely be dogmatically advised. At the present day it may be said that this practice is fairly universal. But is it? Is there not even now a lingering dread in some surgeons' minds of incising or even deeply puncturing an inflamed tissue before suppuration has commenced? And have not many of us heard, when an incision has been made into such inflamed tissues as those just mentioned, something like an observation of pleasure that a fluid like pus has been seen to flow as if to justify the act. Whereas the surgeon's pleasure should be where his duty lies, to give vent to pent up inflammatory fluids before suppuration or other destructive changes have taken place. In my own practice, I, as a matter of routine, cut down freely and immediately upon a finger the seat of thecal inflammation, and always congratulate myself that I have done so when only serum and blood and no pus escapes, for the existence of pus means destruction of tissue under all circumstances.—*Medical Press and Circular.*

[I drew special attention to this subject, and expressed exactly identical views in the Report on Surgery, read before the California State Medical Society, Session of 1887, and published in the transactions for that year.—T. W. H.]

Operation for Varicose Veins.—MR. LAMBERT H. ORMSBY thus describes a very rational operation for the radical cure of varicose veins. The patient is to be kept in bed for two days previous to the operation. On coming down to the operating theatre he is allowed to stand a few minutes so as to ascertain more clearly the situation and course of the veins affected, the integument over which is marked with a colored pencil. A pin is then passed deeply through the tissues behind the vein and brought through the skin at the other side of the vessel. A small piece of bougie is placed over and parallel to the vessel and a loop of carbolized silk is then passed underneath the point of the pin at one side, then over the bougie and so twisted from side to side over the bougie until the vein appears to be completely occluded by the pressure of the pin behind and the bougie in front. Numerous pins may be passed in this manner from ankle to knee. Very little pain or other consequences are experienced.—*Medical Press and Circular.*

Cases of Laparotomy for Tubercular Peritonitis.—The usefulness of this operation was discovered by accident. In 1862 Spencer Wells, operating for a supposed ovarian tumor, opened an encysted peritoneal effusion and found the walls of the cavity and the surrounding peritoneum thickly studded with tubercles. After removal of the fluid he closed the abdominal wound. The patient quickly recovered, not only from the operation but from all evidences of tuberculosis. Hirschfeld has observed a case thus operated upon, which subsequently came to autopsy, and it was found that the tubercles had disappeared from the serous coat of the bowels, where they had existed at the previous operation. The following cases are reported as a contribution to the statistics of this operation, and the second of the two is interesting as being one of the first cases in which the diagnosis of tuberculosis was made before operation. This is the youngest patient on whom the operation has yet been done:

Case I.—Minnie B——, colored, aged 16, entered the Massachusetts General Hospital June 15, 1886. Two weeks before entrance she noticed swelling of the legs. A week later the abdomen was perceptibly swollen and she began to be troubled with dyspnea. Later symptoms were abdominal pain and enlargement and great prostration. June 21st she was tapped by Dr. W. L. Richardson and three quarts of dark yellow fluid drawn off. After this tapping a circumscribed tumor was discovered in the middle line below the umbilicus. With Dr. F. C. Shattuck the writer was inclined to regard the case as one of ovarian cyst, and an exploratory incision was agreed upon. On September 17th I operated with the usual median incision, and an opening was made into the sac. Three quarts of fluid and jelly-like material were removed. The cavity was packed and a tube was introduced into Douglass' pouch. Subsequent examination of the cyst wall proved it to be filled with typical miliary tubercules. The case went on favorably and was discharged six months later with a discharging sinus but otherwise in good condition.

Case II.—Clara T——, 3 years old, entered Children's Hospital July 22, 1887. There was a family history of phthisis. A diagnosis of tubercular peritonitis was made and the case carefully watched by various gentlemen. From the date of entrance to October 15th she was tapped twice and about three pints of characteristic fluid removed each time. On the latter date I opened the abdomen by an incision one inch and a half in length. The diagnosis was completely confirmed. Every portion of the peritoneum within view was thickly studded with round, firm bodies projecting everywhere from its surface. The finger introduced into the abdomen felt as if it were lying in a bag of small shot. A little more than two quarts of fluid was removed. A little piece of drainage tube was introduced and the wound closed. Barring a severe attack of bronchopneumonia, which supervened a few days later, the case went on uninterruptedly to complete recovery.—DR. A. T. CABOT in the *Boston Medical and Surgical Journal.*

Upon the same subject, Kümmel, of Hamburg, says: Since the appearance of Koenig's paper in 1884, the treatment of peritoneal tuberculosis has undergone material changes. While before this only a few cases had been recorded in which, owing to an erroneous diagnosis, an operation was resorted to in this disease, there has since been a considerable increase in the number of operated cases. At the present day we are justified in regarding tuberculosis of the peritoneum as a local disease in the vast majority of instances, which, like tuberculosis of the bones and joints, may be cured by surgical means. The author's experience, supplemented by the numerous contributions of others, demonstrates that it is curable, or at any rate capable of existing for many years without symptoms or disturbances of the patient's health. Kümmel tabulates forty cases of peritoneal tuberculosis treated by operation, including two of his own. Out of this number, only two died of the effects of the opertion (Naumann's), apparently of septicemia; the others recovered promptly. The duration of the cure varied from twenty-five years to a few months. In some cases, as for example, that of Koenig, in which there was a coëxisting pulmonary tuberculosis, a fatal termination took place within a year. The objective signs of the peritoneal tuberculosis were generally those of encapsulated ascites of cystic character. Rarely was the disease associated with general tuberculosis, and in no case was the development of the latter hastened by the operation. It is difficult to imagine why a laparotomy should be followed by these favorable results. That the antiseptic employed was not the curative agent, is shown by the fact that in some of the favorable cases nothing was done beyond removing the ascites and suturing the wound. It must be admitted that the disease sometimes shows a disposition to spontaneous cure, as appears by two of Gräfe's cases.—*International Journal of Surgery and Antiseptics.*

OPHTHALMOLOGY, OTOLOGY AND LARYNGOLOGY.

By WM. ELLERY BRIGGS, M.D., Sacramento, Cal.

Naphthol in Purulent Ophthalmia.—BUDIN has used, in connection with nitrate of silver, a solution of beta napthol 1:2500, in ophthalmia neonatorum. In four cases of blenorrheal ophthalmia in adults, in two cases of purulent ophthalmia in infants, and in six cases of blenorrhea neonatorum, DESPAGNET used a solution of 1:2000 or 1:5000. In grave cases he also touched the lids with nitrate of silver. In infants, without severe symptoms, washing the eyes with the solution and the use of compresses moistened with it are sufficient. It also seemed to suffice in mild cases in adults. In a word, in grave cases of purulent ophthalmia it is necessary to associate nitrate of silver with it; but in mild cases it was satisfactory when used alone. It had the effect of reducing the palpebral edema and reducing the inflammation; but the suppuration persisted, the secretion being thick and abundant.—*Progrès Medical.*

Lactic Acid in Suppuration of the Middle Ear.—DR. P. AYSAGUER states (*Rèvue Mensuel de Laryngologie*) that lactic acid is especially active in treatment of hyperplastic processes, *i. e.*, in fungoid growths, granular otitis or myringitis, polypoid vegetations, and caries and necrosis accompanied with fungoid or neoplastic tissue, in the base of polypoid growths after ablation. It does not act well in simple suppuration, either acute or chronic. The treatment may be commenced with a solution of equal parts of water and acid, rapidly increased to the pure acid. With children we can often begin with the latter. In most cases the pain is very slight, or it may be absent. He has never seen it so severe as to cause the discontinuance of the treatment. It is unnecessary to syringe the ear after instillation, as is required after nitrate of silver and chromic acid. After a certain number of instillations, the fungoid and granular tissues are seen gradually to become covered with a white membrane, which is the cicatricial tissue.—*L'Union Medical.*

Ligation of a Tonsil for Hemorrhage.—DR. E. W. CLARKE reports the successful result of applying a ligature to a tonsil for threatening fatal hemorrhage after tonsilotomy. Various styptics were used without the desired result, and even Paquelin's cautery failed to check the bleeding from the largest vessels. A long clamp, with the blades padded with cotton, one blade being on the outside of the throat and the other on the tonsil, failed;

as it could not be long maintained in position on account of the pain. The patient being very nervous, ether was given, the gag introduced, and as much as possible of the bleeding tonsil seized with a vulsellum having large, bulging double points. A smaller vulsellum was used to draw the tongue out of the way, and a large silk ligature, having a double turn in the first knot, was thrown loosely around the forceps on the tonsil. With the index fingers the ligature was tightened down upon the gland. The first effort failed to secure it, but a second trial was successful. A second turn was taken about the tonsil to make it more secure. The long ends of the silk were secured to the cheek by rubber plaster. The hemorrhage was thus completely checked. The ligature came away on the fourth day without any recurrence of hemorrhage; but when the patient was discharged, a week later, he was still very pale and somewhat weak.—*N. Y. Medical Journal.*

A Case of Aural Vertigo (Meniere's Disease) Relieved by Excision of the Membrana Tympani and the Malleus.—At the last meeting of the American Otological Society, DR. C. H. BURNETT reported the following case. The patient was an unmarried woman, thirty-seven years old, who six years previously had been under treatment for chronic catarrh of the left middle ear, accompanied with difficulty of hearing, tinnitus aurium and a sense of fullness in the affected organ. Treatment did not produce any benefit, and now the symptoms mentioned had become worse, and there was superadded marked aural vertigo. The membrana tympani, in the line of the malleus handle, was found adherent to the promontory, and the consequent retraction of the entire chain of bones was believed to be the cause of the aural vertigo, of the sense of fullness, and of the tinnitus. Excision of the membrana tympani and malleus was followed by entire and immediate relief from the vertigo (which had often been sufficient to cause the patient to hold to a lamp-post for support) as well as from the other symptoms. This good result has been maintained to the present time. The hearing was practically unaffected by the operation.—*Medical News.*

Food and Throat Affections.—DR. EPHRAIM CUTTER says (*Journal of Laryngology*) that he found that catarrhal throat affections were not cured unless the patients were well fed. For example, pharyngitis sicca yielded when patients, in addition to local treatment, drank freely of hot water and ate two mouthfuls of animal food to one of vegetable, which he recommended from experience. This is the proportion laid down by Dr. Salisbury, who teaches that catarrhs come from improper feeding; that is, from food which ferments in the alimentary canal, forming carbon dioxide and other gases, acetic and butyric acid, etc. The carbon dioxide is the most active in producing throat and other catarrhs, by its more or less complete paralyzing action. The doctor experimented by feeding healthy men on an exclusively vegetable diet and regimen, with excess of vinegar, and found they all rapidly developed throat troubles of a more or less severe catarrhal nature. A change to normally constituted animal diet, which did not ferment rapidly, restored them to health. The author makes the following suggestions: 1. In topical treatment, as the late lamented and beloved Dr. Louis Elsberg used to say, we simply arouse a local disturbance, and shake things up in the hope that nature will be able to settle down matters in a normal way. 2. But if we allow the cause to persist (*i. e.*, fermenting food) it is not long ere another local shaking up is needed; and, hence, we have a persistence of the disease—scotched, but not killed. 3. If we remove the prime cause, and build up the body system with food that nourishes normally, the *vis medicatrix naturæ*, we may then stir up things by topical applications and expect permanent relief. For an average case the diet may be as follows: 1. Beef, with mutton for a change. 2. Bread, cracked wheat, rice, potato, sago, hominy, tapioca, hot water, one pint one hour before meals and on going to bed; tea and coffee with cream, no sugar; pepper, butter, salt, horseradish, celery and lemons for relishes. It should be borne in mind that any food that digests perfectly is good food for that individual. Allowance must be made for idiosyncrasies.

DERMATOLOGY AND VENEREAL DISEASES.

By G. L. Simmons, Jr., M.D., Sacramento, Cal.

The Treatment of Acne.—Isaac, after reviewing the various methods of treatment for this affection, highly recommends the following ointment:

℞—Napthol, - - - -	gm. 10.0
Sulphur. Precipit., - - -	50.0
Sapon. Virid.,	
Vaselin. Flav., - - -	aa. 20.0

This ointment is applied to the affected parts with a spatula, and remains from one half to one hour. On the following day irritation of the skin, together with desquamation, is observed, which lasts about eight days. If the irritation following the application be too intense, it is best combatted by oiling or powdering the part. A modification of this salve has been recommended in the more pernicious forms of acne, by adding ten per cent. of camphor and reducing the sapo viridis and vaseline to five per cent. The modified salve must not remain in contact with the affected part longer than fifteen minutes. He further recommends for the same purpose the following paste:

℞—Resorcin, - - -	gm. 2.5—5.0
Zinc. Ox.	
Amyl., - - - -	aa. 5.0
Vaselin. Flav. - - -	12.5

This paste may be allowed to remain in contact with the part for one day, and on the following day is removed with cotton or oil. The good effects are observed in from three to five days. In consequence of their simplicity, Isaac considers these methods of treatment superior to any thus far recommended.—*Münchener med. Wochenschrift*, July 17, 1888.

Characteristics of the Gonococcus.—Finger considers the following characteristics of the gonococci as distinguishable from the micrococci which inhabit the urethra. 1. The gonococcus is shaped like a coffee bean, and two such organisms usually lie with their flat surfaces directed to one another. 2. Masses may be formed by the gonococci, but never chains.

3. It is easily colored and decolorized. 4. It usually vegetates in the protoplasm of the cell near the nucleus. 5. They are usually found in large numbers in the pus of gonorrhea.—*Wiener medizinische Presse*, July 15, 1888.

MATERIA MEDICA AND THERAPEUTICS.

By WM. WATT KERR, M. A., M. B., C. M., Professor of Therapeutics, University of California, San Francisco.

Cocaine in Quinsy.—The *British Medical Journal*, of May 19, 1888, contains an article by DR. DE HAVILLAND HALL in the treatment of acute tonsilitis by cocaine. He reports several cases in which the disease had been cut short by the free application to the fauces of a twenty per cent. solution of cocaine, and believes that the drug acts by diminishing the sensibility so that deglutition can take place without pain, and also by diminishing the local congestion so that the inflammatory process is arrested. It would appear that cocaine is more active after the throat has been cleansed by a solution of bicarbonate of soda.

Opium in Post-Partum Hemorrhage.—DR. R. B. MCCALL, Georgetown, Ohio, reports a case of very severe *post-partum* hemorrhage successfully treated with drachm doses of tincture of opium.—*Phil. Med. and Surg. Rep.*, Feb. 11, 1888. [It has been the experience of many practitioners that opium, *in large doses*, not only relieves after-pains, but is one of the best preventives against hemorrhage in those annoying cases where there is an alternate relaxation and contraction of the uterus. The statement, therefore, found in several works on obstetrics, that opium should not be given for the relief of after-pains, as it may cause relaxation and encourage hemorrhage, can only apply to those cases in which small doses are given. It should be noticed that opium produces uterine contraction only when the drug is given in large doses; also that opium, not morphine, must be given. This is in strict accordance with the therapeutics of the drug, for it has been shown that *large* and *toxic* doses of opium produce a tetanic contraction of unstriped muscular fibres, such as those in the intestines and uterus, while the fact that contraction follows the use of the crude drug, and not of morphine, would indicate the probability that it is due to the presence of another opium alkaloid, thebaine, which is a tetanizer and resembles strychnine in its action.—W. W. K.]

Nitro-Glycerine in Diabetes Mellitus.—DR. R. A. KENNEDY reports a case of diabetes mellitus successfully treated by nitro-glycerine. Mrs. B——, aged twenty years, who was passing 8.75 oz. of sugar daily, was, on the 1st of March, 1887, put on one minim doses of nitro-glycerine, and on the 31st day of the following July, was convalescent, and allowed the ordinary dietary, all medication having been discontinued.—*Canada Medical Record.*

Salol.—This new remedy, which has now been in use for nearly two years, is giving considerable satisfaction as an antirheumatic, antiseptic and antipyretic. It is a salicylate of phenol, in the form of a white powder which is insoluble in water, and may be given in doses of from ten to thirty grains three times daily. The drug is insoluble in the stomach, but on its entrance into the intestine, is at once decomposed by the pancreatic juice into phenol 40 per cent. and salicylic acid 60 per cent., on account of which action it is claimed to produce less gastric irritation than salicylic acid or salicylate of sodium. The therapeutic effects of salol are those of salicylic acid and consequently its greatest success has been in the treatment of rheumatism, but it has also been recommended as an antipyretic in phthisis, and as an internal disinfectant in typhoid fever, summer diarrhea, cholera, pyelitis and cystitis. Externally, it has been dusted on wounds and ulcers as a substitute for iodoform on account of its power as a disinfectant.

MEDICINE AND PATHOLOGY.

By ALBERT ABRAMS, M. D., Demonstrator of Pathology, Cooper Medical College, San Francisco, Cal.

Simple and Rapid Staining of the Tubercle Bacilli.—DR. H. P. LOOMIS directs attention to a new and simplified method especially applicable for the general practitioner. He claims quickness and precision for this method, the whole process occupying but two minutes. The following is the method of preparing the solutions. First. The Fuchsine solution. (1) Pour into a small bottle containing about 4 oz. of alcohol, enough fuchsine to make a saturated solution. (2) Let it stand 24 hours, shaking the bottle from time to time. (3) Into a four ounce bottle containing a 5 per cent. aqueous solution of carbolic acid, pour enough of the first solution to produce a distinct precipitation of the fuchsine. (4) Shake a few times and set aside for 24 hours. This is the carbolic solution of fuchsine to be used. Second. The methyl blue solution. Put into a 4 oz. bottle—

Alcohol, - -	30 parts.
Distilled Water,	50 parts.
Nitric Acid, -	20 parts.

And add methyl blue until the solution is more than saturated. The method of staining is described as follows: 1. Prepare two cover glasses by placing a portion of the suspected sputum on one cover glass, and, by means of the other, pressing it out between them into a thin layer. Allow the cover glasses to dry, and then, holding them firmly with a pair of forceps, prepared sides uppermost, pass them rapidly three times through the flame of a spirit lamp. 2. Hold cover glasses as before and pour on them a few drops of the fuchsine solution; then warm the glasses over a spirit lamp until steam rises, being careful not to allow the fluid to boil: now let the solution on the cover glasses cool. 3. Pour off the fuchsine solution. 4. Pour on the glasses the methyl blue solution and after a half minute or so wash off the excess of staining with water. Mount on a slide in water and examine.—*Medical Record*, June 9, 1888.

MM. ROUS and PITHION recently described before the Medical Society of Lyons a new modified method of staining the bacilli tuberculosis. They substitute for the carbolic acid water, as ordinarily employed, a three per cent. solution of aqua ammonia. In staining the background they prefer a methyl green, inasmuch as the red bacilli become most distinct on a green background.—*Lyon Médical*, July 22, 1888.

[I have tried this method and find it very unsatisfactory when compared to Ehrlich's modification of Koch's method. No time is saved, as claimed by the author, for with Ehrlich's method I have accomplished the entire process by actual calculation in less than two miuutes.—A. A.]

The Treatment of Simple Ulcer of the Stomach.—GERHARDT, according to HERTZKA, refers as follows to the treatment of gastric ulcer. The method of nourishing patients by rectal enemata is not so generally adopted as that of confining them to an exclusive milk diet. In ulcers of recent date a milk diet for a few weeks will suffice, but in those of longer standing it is less efficacious. The peptones, owing to their disagreeable taste, disturb the appetite, and cannot be recommended when nourishment *per os* is practised. They are, however, of value when nutritious enemata are used. A milk and meat diet, preferable in fluid form, is to be recommended, owing to its easy digestibility. The fact that there is a hyperacidity of the gastric secretion in ulcer of the stomach, suggests an almost exclusive meat diet, although in all instances we must individualize. When lactic and butyric acid fermentation exists, carbohydrates must be excluded from the dietary. Large quantities of wine and sodium chloride, by retarding digestion, are also contraindicated. Medicinal treatment is not relied on; we must be guided by the etiology of the disease and the character of the stomach contents. Morphine is contraindicated, it rather retards healing by provoking dietetic disturbances; but when pain is excessive it is a necessary evil, although atropine in many instances does more good. It is unnecessary to warn against the use of hydrochloric acid, when the ulcer is being bathed in a fluid containing an excess of this acid. In old ulcers, however, when the gastric secretion contains a diminished quantity of hydrochloric acid, the use of this acid is sometimes attended by good results. The indication for its use is especially manifested in anemic individuals. The antacids are more often indicated. The alkalies alone are of little value for neutralizing the gastric secretion, as their administration is followed by an excessive production of acid. Soda with bismuth is largely used, the latter particularly, in consequence of its disinfectant and astringent action. Irrigation with mild alkaline solutions, as the Carlsbad water, are of more value. The long continued use of Carlsbad water is followed by a reduction in the acidity of the gastric secretion. The cathartic action of this water is also of value, as it removes the stagnated contents of the stomach. The use of nitrate of silver is also recommended; it should be taken on an empty stomach, and the position of the patient so altered that the solution may come in immediate contact with the suspected seat of the ulcer. The use of condurango is, as a rule, well borne; but it must occasionally be suspended. In conclusion, the most important treatment is the irrigation of the stomach. Lavage of the stomach may be of diagnostic importance, as it is poorly borne when carcinoma exists. Its action is to remove putrescent food, combat hyperacidity, and relieve the stomach in a mechanical as well as chemical sense. It controls pain, increases the appetite, regulates the action of the bowels, and has a curative action on the ulcerated surface. Soft tubes, only, should be used.—*New Yorker medizinische Presse*, July, 1888.

The Treatment of Bronchial Asthma.—According to DR. WILLIAMS, we must consider the following in the treatment of this affection: First. To counteract, if possible, the tendency to asthmatic attacks, which arise generally from some definite lesion, the result of a former inflammatory affection. Second. To allay the asthmatic spasm by reducing the sensibility of the pulmonary nerve plexus. In dealing with the first, according to Salter, no less than 80 per cent. of asthma is traceable to bronchial inflammation in childhood. This inflammation leads to a swelling of the bronchial glands, which, owing to their proximity to the pneumogastric nerves, must compress the latter. Swelling of the bronchial glands is detected by dullness in the interscapular or suprascapular regions. He attributes the good effects observed after the administration of the iodine preparations, to their action in reducing the swollen bronchial glands. Iodide of potassium is more effective in doses of from gr. viii to gr. xv, and large doses do not increase the risk of iodism, provided plenty of water be taken at the same time. Iodide of sodium may be substituted for the iodide of potassium, but the dose is smaller (about 5 gr.), and a combination of the two iodides is often desirable. Mineral waters containing iodine have a favorable effect on asthma, but are slower in their action. Such are the Woodhall and the Burton in England, and the waters of Kreuznach in Germany. The inunction of iodine ointment, or painting the skin with the tincture, has never produced the same therapeutic effect on the asthmatic attack. Free sponging in a bath with tepid or cold water every morning, to which sea salt may be added, and a careful dietary assist the treatment. The treatment of the attack is directed to the administration of anti-spasmodics, which may be classified as stimulant and sedative. To the former belong brandy, whisky, hot coffee, spiritus etheris (in drachm doses) and inhalation of nitrite of amyl. The sedative class includes belladonna, stramonium, etc. These are more efficacious when taken by the stomach or hypodermically, although by smoking them in the form of cigarettes, temporary relief may be obtained. A useful formula is the following:—

℞.—Potassii Iodidi,		ʒii to ʒiii.
Tinct. Stramonii,		ʒii to ʒiii.
Syrupi Scillæ,		ʒi.
Extract. Glycyrrh.,		ʒi.
Aquam,	ad	℥viii.

Sig.—A tablespoonful in a wineglass of water, three times a day.

Chloral is one of the safest and best sedatives during the attack. A dose at bedtime will often enable an asthmatic to sleep through slight early morning seizures, and this medicine will, if pushed strongly, control the asthma. When the paroxysm is very severe, chloroform or ether or iodide of ethyl (m. ii to m. v) may be inhaled. Morphine, hypodermically may be used when the patient can neither swallow nor inhale. Aero-therapeutics, climate and dietary are also considered.—*American Journal of the Medical Sciences*, August, 1888.

Sacramento Medical Times.

JAMES H. PARKINSON, L. R. C. S. I., EDITOR.

COMMUNICATIONS are invited from all parts of the world. When necessary to elucidate the text, illustrations will be furnished without cost to the author.

SACRAMENTO: SEPTEMBER, 1888.

THE TRANSACTIONS OF THE STATE SOCIETY.

The annual volume of transactions has appeared, and at an earlier date than has been the rule. In some respects it is an improvement on that for 1887, the change of type and some attention on the part of the committee having cut it down by almost one hundred pages. One paper still occupies forty-six pages, though the author states that the scissors have been ruthlessly applied to a large portion thereof. The committee complains, as its predecessors have murmured, at the unnecessary amount of correspondence in connection with papers and reprints. This could be obviated if the authors would hand the manuscript to the Secretary during the session at which it has been read, marking the number of reprints required over the signature. Regarding the furnishing of proof for correction, we believe it to be, as a rule, ill-advised and contrary to the interests of the Society; unless the cost of corrections, other than typographical, be borne by the author. Compliance with these suggestions would enable the transactions to appear at least six weeks earlier than at present. The work has been well and cheaply done, and the thanks of the Society are due to its efficient committee and the energetic chairman, Dr. G. F. G. Morgan.

As this journal has persistently advocated the publication of the transactions by the Society, and in volume form, we may briefly compare the present condition of affairs with that now happily passed. In 1885 and 1886 the proceedings were published in journal form, at considerable expense to the Society, the publication not being completed until the month of December of the respective years. In this disjointed form they were useless for exchange or binding, though through the generosity of the publisher this was, in the latter year, obviated. A word as to the financial aspect: At the meeting of 1887 the Society was in debt $150; in April, 1888, the Treasurer reported a balance of $742.75 to its credit, and we understand that there is now on hand $1,400. At the session of 1887 the Society elected thirty-two members, and at the session of 1888, sixty-two. We have made this detailed statement because our conduct in the past has been rather sharply criticized, and it has even been insinuated that our objects were other than those demanded by the best interests of the Society. Assured of the rectitude of our course we persevered, and it now seems that the views of the "small clique" in Sacramento were really those of a majority of the Society. In conclusion, the Society has a handsome balance to its credit, the transactions have been published in less than three months from the annual meeting, and, for the first time since its organization, a full report of the proceedings and of the *discussions* was in the hands of every member within twelve days from the date of adjournment. This report also appeared in the *Southern California Practitioner* and the *Journal of the American Medical Association*, being thus read by 10,000 physicians and reaching every important medical journal in the civilized world. This was accomplished without expense to the Society. The Committee on Publication has seen fit to utilize our report in the transactions—a privilege which was gladly and gratuitously granted. That the best interests of the Society shall ever be our interests we are well assured, for the staff of THE MEDICAL TIMES were workers in the good cause long before the existence of that journal.

NOTES.

Corrigendum.

Owing to a typographical error the following committees have been omitted from the list as published in the transactions of the State Society: Necrology, Medical Legislation, Graduating Exercises, and the Special Committee on Organization of County and District Societies. Slips containing the names of the committees have been forwarded to members of the Society.

Certificates of Membership.

Certificates of membership in the State Society have been sent by mail to all new members. Any member failing to receive his certificate should notify the Secretary, Dr. Wm. Watt Kerr, 522 Sutter street, San Francisco.

A New Medical Register.

The Board of Examiners has determined to publish the fourth edition of the Medical Register, which will appear early in 1889. This is a matter in which every legally qualified practitioner has a personal interest, and we trust that members of the profession will assist the Secretary of the Board by filling out and promptly returning the blanks which will reach them. Upon this the accuracy of the Register largely depends, and neglect on the part of correspondents is hardly excusable. We understand that out of 300 inquiries sent to medical men representing towns and districts, but 50 replies have been received. Of 1200 circulars mailed to doctors and postmasters, 500 have been returned. A stamped envelope, for reply, accompanied each communication. These figures are very discreditable to the profession, and discouraging to the Board.

SOCIETY PROCEEDINGS.

SACRAMENTO SOCIETY FOR MEDICAL IMPROVEMENT.

Regular Meeting July 17, 1888.

The President, J. R. LAINE, M. D., in the Chair.

New Member.—W. F. WIARD, M. D., was duly elected a member of the Society.

DR. J. R. LAINE read a paper on the subject of *Cremation*.

DR. W. R. CLUNESS, in opening the discussion, said that while he agreed with the sentiments of the paper, he did not believe that they would be carried out now, nor in the near future. Earth burial was very deleterious to the living, but the sentimental feeling of humanity would rebel against cremation. Personally, he felt that while he knew it was the best method, he was aware that no combination of circumstances could induce him to adopt it in the case of a relative.

DR. G. L. SIMMONS thought that the question of soil pollution, brought about by the decomposition of human bodies, was one of great importance. He alluded to a well in London (Eng.), the water from which was noted for its sparkling appearance, while it was subsequently ascertained that this well was really in an old grave yard. He believed, however, it would be long before cremation was adopted in the face of the prevailing public sentiment.

DR. W. A. BRIGGS confessed to a similar sentimentality. While his reason would induce him to advocate cremation, he felt that in the case of a near relative or friend he should not be disposed to adopt it. This, no doubt, was prejudice, in part religious, and common to all Christian people. He had no doubt but in time the feeling would grow less strong. He believed that when the population of the earth increased to a great extent and the evils of earth burial became more manifest, these religious scruples would be gradually withdrawn and cremation would become the popular method of disposing of the dead.

Dr. T. A. Snider thought that the author had shown conclusively that cremation was the best method, but he believed that it would be long before it was adopted to any considerable extent.

Dr. W. E. Briggs had not the prejudice against cremation which had been expressed by other members of the Society. He would prefer to have a friend or a relative placed in a crematory rather than in the ground. He predicted that the feeling of prejudice and superstition would ultimately wear away.

Dr. T. W. Huntington believed that the discussion of a scientific subject should be lifted beyond the plane of sentiment and personal prejudice, though he admitted that in this case it was somewhat different. The only proper method of disposing of dead matter was by fire. Personally, he had none of that prejudice against cremation which some speakers had expressed. He thought that the time was not far distant when cremation would be generally adopted. Medical men should discuss the subject more freely.

Dr. H. L. Nichols said that the arguments in favor of cremation were unanswerable except on the grounds of prejudice and superstition. He felt that he was not entirely free from these. As far as the cremation of dead animals and offal was concerned, he had always advocated it, and he hoped that before long it would be in practical operation in this city.

The President said with reference to the burial of offal being as urgent as the burial of human bodies, he did not believe that the necessity was so great. The former were usually healthy bodies and scavengers were plentiful. In this way they were quickly disposed of. Human bodies were closely crowded together in one place to the detriment of the living. The question has been asked whether cremation would not interfere with the resurrection of the body. It would here be pertinent to enquire what would become of the mortal remains of the early Christian martyrs. Formerly, cremation was the usual method, and the change was no doubt brought about by the early Christians, perhaps because there was a possibility of the bodies being eaten subsequent to the cooking process.

SAN FRANCISCO COUNTY MEDICAL SOCIETY.

Regular Meeting May 22, 1888.

The President, J. D. Arnold, M. D., in the Chair.

Bacillus Lepra.—**Dr. J. H. Stallard** exhibited several microscopic preparations of the leprosy bacillus.

Dr. Henry Gibbons, Jr., read a paper entitled *A Plea for the Stomach.*

Dr. J. H. Stallard: Considered milk not a proper diet for adults, as it is not capable of meeting the requirements of adult life. The amount of food taken should be proportioned, not to the digestive capacity, but to the waste of the body. Overfeeding is the rule, and not the exception. He considered two full meals sufficient to maintain health. He found by experience that two pints of liquid and 23 ozs. of food was sufficient to maintain his health and weight during a busy period of his life. The stomach should have a rest before each meal.

Dr. W. P. Gibbons, of Alameda, advocates milk diet, pure milk, of course, and not the adulterated milk of cities. He cited a local epidemic of diarrhea among children which he discovered to be due to the fact that the cows supplying the milk browsed upon the leaves of the poison oak.

Dr. N. J. Martinache lays great stress upon the influence of the condition of the stomach in eye and ear diseases. He cited a case of blepharitis ciliaris treated successfully by careful attention to diet. Three times a day he considered sufficient for children of two years and over to take food.

Dr. M. M. Chipman believed that a better acquaintance with the functions and requirements of the stomach by the general public would make a great advance in public hygiene. A period of fasting is beneficial between meals. More or less derangement of the stomach will cause certain articles of food to disagree, which at other times might be perfectly acceptable. He hoped the time would come when the people would understand anatomy and physiology sufficiently to take care of themselves.

Dr. G. F. G. Morgan said he had frequently found the connections of feeding bottles to conceal tyrotoxicon in appreciable quantities, which might often account for symptoms of digestive disturbances in infants fed by artificial means.

The President said he considered all excess of food above the actual requirements of the system an unnecessary tax upon the vital energies.

Dr. Henry Gibbons, Jr., was of the opinion that the stomach could not be reduced to the basis of a chemical laboratory and that all could not be reduced to one rule. Some required more food than others in order to effect the same weight of assimilation, and each individual case established its own rule. A fast is not always desirable, and the stomach should have food whenever hunger calls for it.

SPECIAL CORRESPONDENCE.

VIENNA.

[FROM OUR OWN CORRESPONDENT.]

Cataract Operations Without Iridectomy—Inoculated Tetanus—A Peculiar Case of Eclampsia—Papilloma of the Vagina in a Child.

At a recent meeting of the Imperial Royal Society of Physicians of Vienna, Dr. Rosenfeld made the following communication. It was known that a large number of oculists had abandoned the method of linear extraction according to Gräfe and had directed greater attention to the flap operation performed with a simultaneous or preceding iridectomy. The case brought before the Society was one in which iridectomy had not been resorted to. The patient had suffered from disturbances of vision for half a year and was unaware of the cause of this condition. He had also suffered from rheumatism. On admission to the hospital, a quite mature cataract was detected in the right eye; perception of light was present, and on the left side there was hypermetropia. The flap operation was performed, the base of the flap being 10 to 11 mm. by 4 mm. in depth. The nucleus of the cataract was easily removed. After the operation eserine was instilled; on the third day the dressing was changed and atropine was instilled; recovery followed without any reaction. Later on, the secondary cataract was operated upon by discission. On examination with the ophthalmoscope, small particles of capsule were discovered at the inner and lower side of the eye, and the fundus could be distinctly seen. As this was the first case which had been operated on in this way, Dr. Rosenfeld had brought it before the Society to encourage oculists toward further experimentation. Prof. Fuchs said that the question of performing an operation for cataract, with or without a simultaneous iridectomy, had been often discussed. Since the introduction of Gräfe's method, the upper portion of the iris had been excised. The plan of leaving the iris intact had cosmetic advantages on account of the coloboma. The French were the first to recommend the operation for cataract without iridectomy. At the last Congress of Ophthalmology at Heidelberg, he had the opportunity of hearing the different opinions on this subject, and the result was that the operation without iridectomy was not reliable as it gave rise to incarceration of the iris. It was also stated that the powers of vision were not improved by this method. The only reason that could induce him to exchange a reliable operation for one less so, was the prospect of improved vision. This, however, was not established. Prof. v. Reuss said that when either of these operations were performed on both eyes it was evident that the patients felt no difference in the power of vision. The surgeon only had a certain satisfaction in seeing an artificial pupil; this, however, was quite indifferent to the patient. He was in favor of the old method. Dr. Adler said that he had abandoned the method of linear extraction for some years. He had operated by the flap method more than one hundred times in private practice and in sixty-eight cases in hospital without an unfavorable result. He would not abandon this method. As to the omission of an iridectomy he agreed with the other speakers. Dr. Bergmeister remarked that the majority of oculists were convinced that an iridectomy was a *malum necessarium*, but the fact that the average success was raised by it, proved that it was a *malum* with good success.

Dr. v. Eiselsberg, assistant to Prof. Billroth, showed a rabbit which exhibited the typical symptoms of tetanus due to inoculation. The virus was derived from the following case. A woman 40 years old had injured her hand while washing a floor in November, 1885, a splinter penetrating the palmar surface. Her husband was only partially successful in his attempts to extract it. During the second week after the lesion, a phlegmonous process supervened which required several incisions. On the twelfth day trismus, and cramps in the injured extremity appeared, and on the following days there was a quite characteristic tetanus of a severe form. The fistulæ which remained from the incisions showed no tendency to heal. The cause of this was found in the presence of a piece of wood 2½ cm. in length, which had remained in the wound and was not extracted until February, 1886. From that time the patient had felt quite well. Some particles of the piece of wood thus removed—which had been preserved by the woman for 2½ years—were, on April 28th, 1888, inserted under the skins of two rabbits. On the second day after the inoculation one of the rabbits was seized with tetanus and died on the fifth day. The second rabbit had survived, and was shown to the Society. It presented distinct symptoms of inoculated tetanus, such as trismus, increased reflex irritability, pleurosthotonos, etc. Dr. v. Eiselsberg said that at a later period he would give an account of his further experiments on the etiology of tetanus.

Prof. Gustavus Braun read the following paper before the Society of Physicians of Vienna. A woman 28 years old was admitted into his clinic (clinic of obstetrics) with the following history. She became pregnant for the third time at the end of August, 1887. Previous to this she had suffered from fainting fits, with loss of consciousness, which subsided on irritation of the skin. At the clinic of Professor v. Schrötter, where the patient had previously been treated, a typical eclamptic attack of over five minutes' duration was observed. Her condition on admission to Prof. Braun's clinic was as follows. She was in a state of stupor and pale, pulse about 68 a minute and feeble, respiration regular, pupils did not react to light. There was some bloody foam on the lips, the lower lip and margins of the tongue had been bitten. Reaction of the skin on irritation was slight, sensibility and mobility of the extremities normal, the urine contained large quantities of albumin and a few casts. The pregnancy was of the seventh month; no heart sounds were audible. An examination revealed the presence of a dilated vulva and vagina, the cervix was 1½ cm. in length and was permeable for two fingers. At five o'clock that evening it was determined to deliver artificially, and 2 gm. of chloral were injected into the rectum. At 6:30 P. M. the pulse was thread-like and the patient collapsed. Version by Braxton Hicks' method was at once performed, and a dead fetus weighing 1,500 gm. and 35 cm. in length was extracted. During the operation the patient collapsed more and more and the respiration became irregular. Artificial respiration was maintained for one hour with hypodermic injections of ether, camphor, etc., but, in spite of treatment, the patient succumbed to acute edema of the lungs. Dr. Paltauf, in describing the autopsy, said that there was an extensive hemorrhage under the hepatic capsule which was torn. There was blood in the cavity of the abdomen and that condition of the liver which Virchow calls "hepatitis hemorrhagica" was present. He was of the opinion that the inflammatory changes in the interlobular veins, the dilatations of the capillaries, the hemorrhages, the nercrotic processes and infarcts were not of a parasitic infectious character, but were due to intoxication. The rupture of the liver and the hemorrhage, were regarded as the effects of the movements at artificial respiration, and were explained by the advanced affection of the hepatic parenchyma. Prof. Kundrat remarked that he had observed a rupture of a fatty infiltrated liver, due to movements at artificial respiration, in an old woman suffering from marasmus. Prof. G. Braun said that during the life of the patient it was quite impossible to recognize this condition of the liver. The skin was, indeed, very pale, but there were no other characteristic signs. It seemed that after the expulsion of the placenta the abdomen had a peculiar feeling, but this was not at all sufficient to establish a diagnosis of internal hemorrhage from the liver. It rather created the impression that the uterus had been torn. This supposition was negatived by the fact that no blood had escaped externally and examination showed that the parts were normal. Prof. v. Bamberger said that there could be no doubt that the case was one of intoxication. The hemorrhage and the changes in the blood vessels supported this supposition. In Virchow's case there was a similar condition present in the liver. It was a case of mussel poisoning, and it was remarkable that the poison was found only in the liver. In a case of phosphorous poisoning at his clinic, there were similar hemorrhages and congestions in the liver, kidneys and heart. There was engorgement of the blood vessels to a degree equalling that met with in subjects injected for anatomical purposes. This condition accounted for the numerous hemorrhages. He had recently observed a case of poisoning by phosphorous in which there was no engorgement of the blood vessels. This might, however, be explained by the fact that the autopsy had been made at a late period.

Dr. Schustler showed a case of papilloma of the vagina in a child four years old. Her parents were healthy and she had been quite well until four months ago. Since then she had suffered from vaginal blenorrhea. Two months ago the mother observed that several small tumors protruded from the vagina of the child when she cried. These polypi were ligated and removed. Subsequently a tumor the size of a nut protruded through the hymen but could be readily replaced. On introducing the finger it was found that the tumor was attached to the anterior wall of the vagina and that several other tumors lay behind it, and were attached to the vesico-vaginal septum. Four days ago the tumors became ulcerated and bleeding occurred; except for this and the profuse blenorrhagia, the child felt well. Later, dysuria supervened; this was a symptom met with in these cases. The exact nature of the tumors would be elucidated by microscopical examination after extirpation. Two varieties of tumors might be considered in this case, namely, fibroma and sarcoma; both had only rarely been observed in the vaginæ of children. Prof. Breisky, who had written on the diseases of the vagina in the work of Billroth and Luecke, stated that only six cases of sarcoma of the vagina in children were recorded. In four of these cases the tumor was attached to the anterior wall.

VIENNA, August 1st, 1888.

CENTRAL AMERICA.

Drug Stores and Doctors.—Prevailing Diseases.—Water Supply.—The Canal Company's Sanitary Service.—Primitive Funerals.

The traveler in Central American cities and towns cannot fail to notice the large number of drug stores. No other business seems so well represented nor its stores so prosperous looking. The Central American feels that drugs are his safeguards, and he is liberal in his patronage, even when the medicines are not exactly necessary to his well-being. As a rule, here as elsewhere, the more limited in knowlege the patient, the greater dabbler in medicine does he prove to be; and I am told, on the best of authority, that it is mainly upon this class of persons that the drug stores thrive. Patent medicines are largely used. In Mazatlan, Mexico, and on the Isthmus, the stores are especially well provided with this line of goods.

Doctors in Central America are not, as a rule, associated in the ownership of the drug stores. They have their preferences and send their prescriptions to their particular druggists. The physicians consist almost entirely of natives, foreign practitioners being quite limited in numbers. San Salvador, a city of 30,000 inhabitants, has but one foreign physician, a German. So it is with the other cities of these Republics; but the native physicians as a class are well educated. The majority have received their preliminary training in their own country, and have finished their studies in the Old World—usually Spain. Contrary to the American system of fees, the Central American doctor receives a yearly stipend for keeping his client well. The amount varies, according to circumstances, from $200 to $500, equivalent in our money to $150 to $400 Poorer patients, of course, in the same ratio. The doctor attends in sickness and in health—truly the friend of his patient. Should the latter die during the year, the money is refunded *pro rata*. Visits are made on foot; or, in the larger cities, the tramway facilitates the doctor's calls. The physician in Central America who keeps his carriage and pair, is a novelty indeed. Concerning prevalent diseases in the Guatemalan Republic, though less so in Salvador, Nicaraugua, Honduras and Costa Rica, tape-worm and goitre are very common. At present, in the city of Guatemala, a so-called "Tape-worm Specialist" is reaping a rich harvest. He has the reputation of telling at a glance the subject of a tape-worm, and by close inspection of the eyes can accurately (?) predict the length of the parasite. From descriptions of the medicine used, I am led to believe that he depends for its removal on the French preparation of pomegranate—Tanret's pelleterine. He charges, and collects in advance, from $50 to $100 for a complete cure, and, as I have said, does a lucrative business. The water supply there is noticeably bad, and this no doubt has some bearing on the presence of so many cases of tape-worm. For goitre, the "let alone" treatment seems to be in vogue, and wonderful recoveries result—so they say. Several young American dentists, recent graduates, are doing very well in this same Republic. They announce themselves for some days previous to their visit to the town, and on arriving find plenty of work on hand for them.

The water supply in most of the cities and villages is very imperfect. Mazatlan, with 30,000 inhabitants, depends wholly on the rain. The roofs are of tiles and the water is conducted into huge cisterns beneath the inner courts in the Mexican houses. At the time of my visit there had been a drought. Everything lacked water, and what there was of it in the house cisterns sold readily at 25 cents a gallon. Acapulco, not quite so thickly populated, is better off for water, having a series of public wells; but the stenches from their vicinity does not add to the value of the water. Guatemala, of 80,000 souls, in the Republic of that name, receives its supply from the mountains through a stone aqueduct. The water has a perceptible taste, and the numerous cases of tape-worm and goitre do not attest its superiority. The other cities and towns depend mostly on the rain.

If the water-supply is bad, the odors which arise, especially from the port towns, is insufferably worse. The rich vegetation, animal matter, and human excreta, all mingled together, even in the streets of the seaport towns—Acajutla, Acapulco and Corinto—gives a stench that "smells to heaven." Drainage is very imperfectly attempted—often not at all. Guatemala has very small, covered gutters, in the middle of the streets and just below the surface. As a rule they are thorougly blocked, or too small to be of use; so that in the end dependence is mostly placed upon the "sewers of Central America," as they are aptly called. These are the carrion crows or vultures who greedily consume all decaying material, gorging themselves upon it. They are protected by law and by the people who recognize their great value to mankind, and this immunity from harm makes them exceedingly bold. Even a stranger can approach and almost touch them, so thoroughly safe do they feel.

The diet of the natives is of the simplest character. Frijoles, nigra or black beans, coffee without milk or sugar, into which stale bread is broken, and plantains or bananas, comprises their daily fare. Not infrequently we met natives who never taste meat, and to whom milk is an unheard of luxury.

Foreigners before becoming acclimated suffer greatly with digestive trouble and fevers; the natives to a less extent. In Panama it is the fever, which is the most dreaded. For each foot of progress on the canal a life is said to have been sacrificed. The first work of the Panama Canal Company was the erection of a hospital; and on the heights, a mile from Panama, the buildings can be plainly seen. The hospital is on the plan of a series of connecting wards, and the accommodations are superior. Immediately the fever seizes the canal workman, he is sent to this hospital. As convalescence is established he is moved to the Island Hospital, or home for convalescents, on one of the beautiful little islands which dot Panama Bay. Thus the former great terror of the Isthmus has been almost removed. The immense numbers at work, and seeking work, on the canal attest this fact. The natives, and even the ignorant Jamaica negroes, appreciate the importance of bringing on a sweat in the Panama fever, and a decoction of a sour orange, which grows wild throughout the Isthmus, has great repute as a medicine for that purpose. Among physicians the main reliance is placed on quinine, which is given in heroic doses. Venereal disease has made great havoc among the ignorant classes of Central America. Especially the negroes along the canal show the ravages of syphilis. As marriage there is almost unheard of, the spread of this dread disease is unlimited. Gonorrhea, as may well be imagined, is quite prevalent. The natives use, and quite successfully in the gleety stage, the milk of the cocoanut. It neutralizes the urine and acts as a demulcent.

The poorer classes of these Republics are all a careless, happy people.

Their religion is Catholic. They die at peace with themselves and all the world; yet, often without enough money to bury them. The rites are very simple in such cases. Their bodies are carried on a board litter, a hole is scooped in the sand of the beach, and they are soon covered and out of sight. The value of life is so lowly estimated that the friends now and then carry even the living to the grave; but there the corpse(?) usually musters strengh enough to protest, and he is taken home again, to live or die, it matters little to them. Monkey Hill, one and one-half miles from Aspinwall, is a noted place for such burials. The time is not far passed when people died too rapidly for coffins to be supplied, so one served to carry the dead to the grave, from whence it was returned to do similar service again, the bodies being buried without coffins.

G. L. SIMMONS, JR.

August 2, 1888.

BRITISH MEDICAL ASSOCIATION.

GLASGOW.

[FROM OUR OWN CORRESPONDENT.]

The City of Glasgow.—The President's Address.—The Address in Medicine.—The Address in Surgery.—Macewen on the Surgery of the Brain and Spinal Cord.—The Address in Physiology.—The Festivities.—The Event of the Meeting.

An English traveler describing Glasgow at the end of the seventeenth century gave it the palm among the towns of Scotland, and Defoe called it "one of the cleanliest, most beautiful, and best built cities in Great Britain." Defoe would have used far different terms if he had visited the commercial capital of Scotland in this year of grace. Wealthy, enterprising, industrious, but—clean or well built! No.

Glasgow, however, is something more than a large, rich and pushing commercial city, for it contains an ancient university, founded in 1450, upon the model of the University of Bologna. One of the most important faculties of Glasgow University is the medical. The British Medical Association, which commenced its fifty-sixth annual meeting in Glasgow on August 7th, was welcomed by the Professor of Medicine in the University, Dr. W. T. Gairdner, after hearing a sermon in St. Mungo's Cathedral from the very Rev. J. Caird, D.D., Principal of the University. Professor Gairdner thundered against "obscurantism in education," and will consequently never be forgiven by certain sections of the profession. That is to say, the two extremes; on the one hand the men to whom Latin, and Greek, and dilletanteeism are dearer than clinical experience, and who affect to sneer at modern pathology and modern surgery, and on the other the men who claim to be practical men, who sneer at Latin and Greek, and pathology indifferently, and think that success in life is to be gained only by what *Punch* called "a good bedside manner," and by cultivating the art of compounding palatable mixtures for slight ailment. Not that Professor Gairdner wants to bind down the general boy, or the specialized student, to books or theorizing. On the contrary, he says that our present programme of school discipline is still too largely founded on the idea that at six or seven years old, a child may be withdrawn in a great measure from the strictly natural, wholesome and all round education of the faculties to have his nose buried for ten long years in books and papers and mental arithmetic, till his eyes became myopic and his little brain suffered a corresponding deformity.

The address on medicine was given by Dr. Clifford Allbutt, F.R.S., the leading physician of the important manufacturing town of Leeds, and was mainly directed to urging upon the profession a more philosophical method in nosology. We ought not, he argued, to be satisfied with classification founded upon symptoms and morbid anatomy, but should look into the relations of diseases to each other, and the relation of human diseases to those of the other animals. It would seem, however, that we cannot have a scientific system of comparative pathology until comparative physiology has reached a more advanced stage. Dr. Allbutt himself quoted a variant of a well known phrase, which he said he was accustomed to use in speaking to his advanced students: *Nihil in pathologia quod non prius in physiologia.*

Sir George Macleod's general address in surgery was one more "jubilee oration," let us hope the last. He gave a sketch of the advance of surgery during the last half century, able in its way, but everybody has grown a little tired of hearing about the beneficent discovery of chloroform, the triumphs of the antiseptic system, the beauty of drainage, and so on. This address was given on Thursday afternoon, and more interest had been excited in the morning by Dr. Macewen, Lecturer on Surgery to the Royal Infirmary, Glasgow, who gave a most brilliant address to the whole Association, on the surgery of the brain and spinal cord. The first case in which he had operated for intracranial lesion, being led to the diagnosis by localizing symptoms alone, occurred so long ago as 1879, and since then he has had a series of twenty-one cases, excluding fractures of the skull or other immediate effects of injury. Three of these cases were *in extremis* when operated on; all the others recovered. This is a remarkable record, and entitles Dr. Macewen to speak with some authority on the selection of cases. Subdural cysts appear to be the most favorable, these are commonly of traumatic origin; secondly, tumors of the dura mater; thirdly, abcesses, if of moderate dimensions and treated early; and fourthly, tumors of the cerebrum. The removal of these last, which involves the excision of a wedge of brain, leaves permanent and hopeless hemiplegia, and very great danger of what Dr. Macewen calls anchoring of the brain; *i. e.*, its fixation by cicatricial tissue to the cranium. As a consequence of this fixation each variation in the bulk or movement of the brain causes a dragging, resulting in vertigo and epilepsy. He also related six cases in which he had operated on the spinal column, with two deaths; one from acute tuberculosis several months after the operation, the other within a week. Two cases which he related at length were extremely striking. Both were children with complete paraplegia, and incontinence of urine and feces, and wasting and lividity of the lower limbs, due to angular curvature with ankylosis of vertebræ and connective tissue growths pressing on the cord. Both cases appeared well nigh hopeless. The laminæ of the fifth and sixth dorsal vertebræ were removed, and the mass of connective tissue between the theca and the bone removed. In both improvement began at once, the first change being disappearance of the lividity of the limbs. In time both children recovered the power of walking; one, a boy, being able to go to school and play football. Dr. Macewen warns against operating when there is any fever, or has recently been.

The address in physiology, given by Dr. J. G. McKendrick, Professor of the Institutes of Medicine (*i. e.*, physiology) in the University of Glasgow, was on the function of respiration and the gaseous constituents of the blood. He gave a sketch of the gradual growth of knowledge from the time of Borelli, Boyle, Malpighi and Hooke to the very latest new theory of Fleischl v. Marxon, of Vienna. This address was illustrated by experiments, and by the exhibition and demonstration of a new mercurial vacuum pump. He incidentally presented one of those curious calculations which physiologists sometimes make to impress the non-physiological mind. He wished to emphasize the enormous absorptive surface for oxygen which the red blood corpuscles present. The number of corpuscles in the blood of a man of ordinary size he estimated at over twenty-two trillions; a statement which conveys absolutely no idea, beyond a general idea of an immense number, to the human mind. The area of each corpuscle is, however, known, and a simple calculation gives the result that the total superficial area of all the red corpuscles of an ordinary man is about 3,151 square yards; or nearly three-quarters of an acre!

As to the festivities of the meeting, perhaps the less said the better. The weather has not been exactly genial; a good deal of rain has fallen and the winds have been un-summerlike. With the best intentions, the Glaswegians have not been very hospitable. The Lord Provost (*i. e.*, Mayor) and corporation gave an entertainment in the exhibition (some fireworks are being let off as I write), and this has been, perhaps, the best managed social event. The Professors' *Conversazione* in the university was a most dismal failure. The struggle into the refreshment room, to find plain cake and lemonade, and the struggle for coats and hats were not pleasures; indeed, there was very nearly a panic in the cloak room. The dinner in St. Andrew's Hotel was well done, but the speeches! The Church was supreme, and four sermons in succession was more than any one could stand, even after dinner.

The event of the meeting was Macewen's reception; the whole audience rose and cheered at the end of his address. Such an ovation is unprecedented within the memory of the oldest frequenter of the association meetings.

Glasgow, August 11, 1888.

PUBLIC HEALTH.

By W. R. CLUNESS, M. A., M. D., Sacramento, Cal.

Mortality.—The deaths registered in 71 town districts of the State during the past month, in a population of 712,500, correspond to an annual rate of 16.16 a thousand, the total mortality having been 960. One hundred and ninety-eight deaths were due to zymotic diseases, giving an annual rate of 3.33. Of these 60 resulted from cholera infantum, 20 from diarrhea and dysentery, 37 from diphtheria, 35 from typhoid fever, 12 from cerebro-spinal fever, 13 from whooping cough and 7 from scarlet fever. 206 deaths were referred to diseases of the respiratory organs, giving an annual rate of 3.47. Of these 137 resulted from consumption, 46 from pneumonia, 16 from acute bronchitis and 7 from pulmonary congestion. The average annual death rate, from all causes, occurring in the ten largest cities and towns in the State and representing a population of 558,000, was 16.42. The highest death rate for the month occurring in cities having a population of 10.000 or more inhabitants, was reported from San Francisco, it having been 20.76; the lowest was reported from Stockton and Los Angeles, the rate having been just 7.20 a thousand in each city.

METEOROLOGY.

By J. W. ROBERTSON, B. A., M. D., Assistant Physician to the State Asylum for Insane, Napa, Cal.

Rainfall.—As usual during the month of July, the rainfall was light. Along the coast of Northern California, above Cape Mendocino, there were heavy showers, but south of that point the majority of stations report but a trace.

Temperature.—Along the Coast belt the mean temperature has been very moderate, ranging from 56 at Eureka to 59 at San Francisco, and rising to 67 at San Diego. Extremely warm weather was noted at Yuma, Fresno, Red Bluff and other places too far inland to be modified by the cool coast breeze.

California—Tabular Statement for July, 1888.

STATIONS.		TEMPERATURE.						RAINFALL.		Mean Relative Humidity	WEATHER.			WIND.	FURNISHED BY—
		Mean	Highest	Lowest	Mean Highest	Mean Lowest	Mean Daily Range	No of Days Rain Fell	Total Rainfall		No. of Clear Days	No. of Fair Days	No. of Cloudy Days	Prevailing Direction.	
Auburn	Cal.	76.5	101.0	54.0	......	......	......	......	0.00	......	......	......	......	S.	Southern Pacific Co.
Colfax	"	75.0	102.0	54.0	......	......	......	......	0.00	......	......	......	......	N.	" " "
Eureka	"	56.5	73.0	48.4	62.6	53.3	93.0	7	0.44	......	......	......	......	N.	Signal Service U.S.A.
Fresno	"	80.6	109.2	53.5	99.5	63.9	35.6	3	trace	......	......	......	......	NW.	" " "
Keeler	"	79.3	98.0	54.1	92.5	67.8	24.7	2	0.17	......	21	6	4	E.	" " "
Los Angeles	"	67.9	95.0	49.0	87.4	59.3	28.2	1	0.04	......	......	......	......	W.	" " "
Monterey	"	64.6	90.0	58.0	......	......	......	......	0.00	......	......	......	......	SE.	Southern Pacific Co.
Napa	"	65.1	91.0	46.0	76.1	54.1	22.0	1	0.03	......	26	4	1	S.	Sta. Napa Ins. Asylum
Oakland	"	62.2	91.0	52.0	......	......	12.7	0	0.00	83.9	15	15	1	SW.&W	J. B. Trembley, M.D.
Paso Robles	"	73.5	100.6	53.0	......	......	......	......	0.00	......	......	......	......	W.	Southern Pacific Co.
Red Bluff	"	80.9	109.0	53.9	96.7	65.7	31.0	2	0.07	......	......	......	......	S.	Signal Service U.S.A.
Sacramento	"	71.6	104.0	51.0	89.5	57.3	32.1	0	trace	......	29	2	......	S.	" " "
San Diego	"	68.4	77.2	54.6	74.3	62.5	11.8	2	0.01	......	23	4	4	NW.	" " "
San Francisco	"	59.1	93.4	51.0	68.4	54.4	14.0	1	0.01	......	9	18	4	SW.	" " "
Santa Barbara	"	67.0	86.0	51.5	76.0	58.0	18.0	0	0.00	......	27	2	2	E.	Hugh D. Vail.
Santa Cruz	"	66.4	98.0	52.0	......	......	......	......	0.00	......	......	......	......	S.	Southern Pacific Co.
Yuma	A. T.	90.4	113.7	63.0	106.5	76.4	30.1	3	0.04	......	......	......	......	S.	Signal Service U.S.A.

Blank (......) indicates data missing.

CLEAR DAY—One on which cloudiness is 3 or less on a scale of 10. FAIR DAY—One on which cloudiness is from 3 to 7.
CLOUDY DAY—One on which cloudiness is over 7.

REVIEWS AND NOTICES.

Third Annual Report of the State Board of Health of Maine, for the Fiscal Year ending December 31, 1887. Augusta: Burleigh & Flynt.

Three-fourths of this volume are occupied by the report of the Secretary and extracts from the reports of local Boards of Health, showing that much valuable work has been done. A very excellent paper on "Motives and Methods for Sewering Cities, Villages, Towns, and Summer Resorts, and for Domestic Sanitary Improvement, House Plumbing," etc., by G. C. Jordan, C. E., a member of the Board, deserves mention. It is well illustrated, and points out many of the every-day sources of air and water contamination in town and country.

Diseases of the Female Urethra and Bladder, by I. Winckel, M.D., Professor of Obstetrics and Gynecology at the Royal University, Munich, and Diseases of the Vagina, by A. Breisky, M.D., Professor of Obstetrics and Gynecology at the Royal University, Vienna. Being Volume X of the Cycloypedia of Obstetrics and Gynecology. New York: Wm. Wood & Co. 1887.

This excellent volume is one of the most valuable of a valuable series. The first part, Diseases of the Female Urethra and Bladder, covers a neglected field in an admirable manner. The historical retrospect, although brief, is interesting, and repeatedly illustrates the old adage, *multa renoscentur*. The succeeding chapters are succinct, comprehensive, and practical. Diseases of the vagina are dealt with somewhat more at length, but in the same clear and practical manner. The chapter on inflammatory affections is especially satisfactory, illustrating as it does that German tendency to minuteness and systematisation which has been so fruitful of criticism and progress.

The Language of Medicine. A manual of the origin, etymology, pronunciation and meaning of the technical terms found in medical literature. By F. R. Campbell, M. D., Professor of Materia Medica and Therapeutics, Medical Department of Niagara University. New York: D. Appleton & Co., 1888.

"A well educated gentleman," says Ruskin, "may not know many languages, but whatever language he knows he knows precisely; whatever word he pronounces he pronounces rightly. Above all, he is learned in the *peerage* of words; knows the words of true descent and ancient blood at a glance from words of modern canaille; remembers all their ancestry—their inter-marriages, distantest relationships, and the extent to which they were admitted and the offices they held among the national noblesse of words at any time and in any country." This breadth of knowledge and precision in the use of language is not a necessity of the artist, the litterateur only, but of the man of science also, and preëminently of the physician, and can be acquired only by diligent study of the current value of words and of their lineage. The genealogy of that "wonderful composite called English," as Lowell speaks of it, "the best result of the confusion of tongues." carries the student back to the fountain heads of the language, especially to the Greek, the Latin, the German and the French. Here he finds many a virile and prolific ancestor of whole families of English words, modified indeed by the infusion of new blood, but still retaining the characteristic features as well as the rank and the power of their first parents. But, unfortunately, in spite of that much vaunted, but rarely administered specific known as preliminary examination, "small Latine and lesse Greeke" fall to the lot of the average medical student. To remedy this deficiency the author of "The Language of Medicine" has prepared the volume before us. It is admirably adapted to the purpose in view. Part 1, treating of the origin of the language of medicine, is instructive as well as entertaining. Part 2 presents the Latin element concisely, and in the chapters on orthoepy and words commonly mispronounced, the average physician no less than the average student, will find abundant food for rumination. The succeeding parts treat of the Greek and other foreign elements of medical language, and although the we began the examination of this work full of prejudice against it, we now recommend it with confidence to those physicians and medical students who have not the advantage of an earlier acquaintance with Greek and Latin, and who desire to know the language of medicine "precisely" and to pronounce it "rightly."

THE INFECTIOUS DISEASES. By Karl Liebermeister, Professor of Clinical Medicine in Tübingen, Germany. Translated by E. P. Hurd-M. D., with notes and appendices. Vols. I and II. Physician's Leisure Library Series. Detroit: Geo. S. Davis. Price, 25 cents; cloth, 50.

We have in two small volumes a succinct *résumè* of the infectious diseases, presented in that fascinating manner so characteristic of the thorough teacher. The appendices of the translator are valuable additions to the work. Contrary to the usual indifference manifested by German writers, the therapy of the diseases considered in this book receives more than the customary consideration. Liebermeister has always been a most enthusiastic advocate of the cold water treatment in typhoid fever, and the present work shows no abatement of this enthusiasm, notwithstanding the fact that this method of antipyresis is now being abandoned in Germany, the good results previously claimed having been proven by competent observers to be largely illusory.

BOOKS AND PAMPHLETS RECEIVED.

Antipyrine. By Benjamin Marshall, M. D., San Francisco. [Reprinted from the *Pacific Medical and Surgical Journal.*]

The Progress of Medicine Measured by the Progress of Therapeutics. By Sam'l. O. Lewis Potter, M. A., M. D., San Francisco. [Reprinted (in part) from the transactions, Medical Society, State of Cal.]

Abdominal Surgery. By Hal C. Wyman, M. S., M. D., Professor of Surgery and Operative Surgery, Michigan College of Medicine and Surgery, Surgeon Detroit Emergency Hospital, etc. Physicians Leisure Library Series. Detroit: George S. Davis. Paper, 25 cents; cloth, 50 cents.

MEDICAL NEWS.

LICENTIATES OF THE BOARD OF EXAMINERS.

At the regular meeting of the Board of Examiners, held August 1, 1888, the following physicians were granted certificates to practise medicine and surgery in this State:

T. Allen Barber, San Diego; M. Dep. Univ., City of New York, Mar. 12, '54.
Lafayette Bentley, Lugonia; Univ. of Trinity Coll., Canada, May 11, '81.

George Richard Bowles, Santa Rosa; M. Dep. St. Louis Univ., Mo., Mar. 3, '66.
James Patton Boyd, Santa Ana; M. Dep. Univ., City of New York, Feb. 18, '69.
William B. Bullard, Los Angeles; M. Dep. Bowdoin Coll., Me., May 25, '59.
William P. Cash, San Diego; Kentucky School of Med., Ky., June 30, '87.
David Dufresne, San Diego; Victoria Univ., Montreal, Canada.
Holman E. Ferrin, Watsonville; M. Dep. Univ. of Vermont, June 26, '82.
William N. Finney, San Bernardino; Missouri M. Coll., Mo., Mar. 5, '78.
Adam Franke, Linkville, Or.; Jefferson M. Coll., Penn., Mar. 9, '67.
Forrest B. Freeman, Gridley; M. Dep. Univ., City of New York, Mar. 13, '83.
John Locke Hardeman, San Diego; St. Louis M. Coll., Mo., Mar. 8, '78.
Alfred Wm. Harding, San Diego; Royal Coll of Surg., England, July 28, '70, and M. B. Univ. of London, Eng., Dec. 13, '71.
Henry M. Hewitt, Whittier; Rush M. Coll., Ill., Feb. 26, '78.
Frederick J. Kruell, Los Angeles; Rush M. Coll., Ill., Feb. 22, '81.
Jonah Nichols, West Point; M. Dep. Univ. of Virginia, June 29, '87.
J. D. Nietscke, Buckeye Valley; Memphis M. Coll., Tenn., Feb. 25, '52.
Robert S. B. O'Brien, San Francisco; McGill Univ., Canada, Mar. 28, '73.
Edwin T. Phillips, Los Angeles; Kansas City M. Coll., Mo., Mar. 6, '83.
Amos W. Plummer, Los Angeles; Jefferson M. Coll., Penn., Mar. 13, '80.
John A. Randolph, Willows; Missouri M. Coll., Mo., Mar. 4, '84.
James P. Richardson, Brentwood; M. Dep. Columbian Univ., D. C., Mar. 3, '68.
Joseph W. Rowan, Murietta; Univ. of Trinity Coll., Canada, Apr. 3, '88.
George B. Rowell, San Bernardino; McGill Univ., Canada, Mar. 29, '84, and Royal Coll. of Surg., England, July 24, '84, and Coll. of Phys. and Surg., Quebec, Canada, May 12, '86.
James C. Shafter, San Francisco; Coll. of Phys. and Surg., New York, Feb. 27, '73.
K. J. Slaughter, Oakdale; St. Louis Coll. of Phys. and Surg., Mo. Mar. 4, '84.
Wilbur Gray Smith, San Francisco; School of Med. of the Univ. of Maryland, Mar. 6, '80.
Francis W. Steddom, Los Angeles; Miami M. Coll., O., Mar. 9, '87.
William S. Wallace, Santa Rosa; Jefferson M. Coll., Penn., Mar. 12, '81.
Murray L. Johnson, Oakland; Cooper M. Coll., Cal., Nov. 17, '87.

Murray L. Johnson, of Oakland, was granted a license by this Board in December, 1887, and so recorded in this office; but the certificate having been made out in the name of Henry L. Johnson, it was returned and the record cancelled, and another issued as above. In February last Dr. Adam Franke, then a recent arrival from the East, presented his diploma to the Board on application for a license, and then departed in search of a location. Nothing further having been heard from him, the application was rejected at the July meeting, because the necessary affidavit, fee, and letter had not been received. Meanwhile Dr. Franke had located at Linkville, Or., where much of his practice extends into California. On the 28th of July he communicated with this office, explaining, and regretting his long non-completed application, asking that the action of the Board be reconsidered. The request was granted, and, upon presentation of all required evidence, the license was granted as above. The application of Edw. H. Griswold, of Los Angeles, was rejected because of insufficient credentials. The applications of J. H. Beauford, of Butte City, and J. E. Davison, of Woodland, being incomplete, were laid over. The application of J. L. Vaughan, of Lodi, on a diploma from the Memphis Institute (Eclectic), was withdrawn.

The Secretary reported progress on the fourth edition of the Medical Register, having 1,200 letters ready to mail to doctors and postmasters, asking names and locations of physicians in their vicinity. We hope the profession throughout the State will aid us in the work by promptly reporting their own names and those of their neighbors.

R. H. PLUMMER, Secretary.

Official List of Changes in the Stations and Duties of Officers serving in the Medical Department of the U. S. Army (Division of the Pacific), from July 16th to August 16th, 1888.

Major Robert H. White, Surgeon, is relieved from duty with Battalion 1st Inf. at Santa Barbara, Cal., and will proceed to Angel Island, Cal., on public business; on completion of which he will stand relieved from duty in this department. S. O. 43, Dept. California, July 17, 1888.

Assistant Surgeon Curtis E. Munn will proceed to Santa Barbara, Cal., and report to commanding officer of the 1st battalion Inf. for duty. S. O. No. 43, Dept. California, July 17, 1888.

Captain Joseph K. Corson, Assistant Surgeon, leave of absence for one month, with permission to apply for an extension of one month. S. O. No. 78, Dept. Columbia, July 13, 1888.

1st Lieut. Leonard Wood, Assistant Surgeon, is relieved from duty at Fort Huachuca, Ariz., to take effect at the expiration of his present leave of absence, and will report to the commanding officer at Fort McDowell, Ariz. S. O, No. 162, A. G. O., July 14, 1888.

Assistant Surgeon John J. Cochran will proceed to Benicia Barracks, Cal., on public duty; on completion of which he will return to these headquarters. S. O. No. 44, Dept. California, July 20, 1888.

Assistant Surgeon M. M. Walker to proceed to Benicia Barracks, Cal., and report to the commanding officer for temporary duty as medical officer at that post and at Benicia Arsenal, Cal. S. O. No. 45, Dept. California, July 24, 1888.

Major Egon A. Koerper, Surgeon, relieved from duty at Fort Keogh, Mont., and ordered to duty at Fort Walla Walla, Wash. Ter. S. O. No. 175, A. G. O:, July 30, 1888.

1st Lieut. Leonard Wood, Assistant Surgeon, to proceed From Fort McDowell to San Carlos, Ariz., and carry out the instructions of the department commander; upon completion of that duty to return to proper station. S. O. No. 89, Dept. Arizona, August 1, 1888.

Assistant Surgeon Joseph K. Corson, leave of absence extended one month. S. O. No. 178, A. G. O., August 2, 1888.

Major John H. Janeway, Surgeon, granted leave of absence for one month on surgeon's certificate of disability. S. O. No. 41, Div. Pacific, August 8, 1888.

Official List of Changes in the Medical Corps. U S. Navy (Pacific Station), from July 20th to August 20th, 1888.

Surgeon G. W. Woods, having completed his examination at Washington, D. C., for promotion to the grade of Medical Inspector, reported for duty at Mare Island, Cal., July 26th.

Surgeon C. H. White ordered to the "Trenton," and as Fleet Surgeon of the Pacific squadron, July 27th.

Medical Inspector Adrian Hudson, from the "Trenton," to return home to be examined for promotion, July 27th.

Assistant Surgeon E. W. Auzal, from the Marine Rendezvous, San

Francisco, ordered to the U. S. Naval School, Annapolis, Md., July 30th.

Assistant Surgeon William Martin, to the Marine Rendezvous, San Francisco, Cal., July 30th.

Passed Assistant Surgeon Hervey W. Whitaker, detached from "Mohican" and placed on waiting orders, August 10th.

Official List of Changes of Stations and Duties of Medical Officers of the U. S. Marine Hospital Service (Division of the Pacific) for the three weeks ended August 20, 1888.

Surgeon Henry W. Sawtelle, detailed President of Board to select a site for quarantine station at San Diego, Cal.

Passed Assistant Surgeon A. H. Glennan, detailed as Recorder of Board to select a site for quarantine station at Port Townsend, W. T.

ITEMS.

Aiding the Law.—The Health Department of the city of San Diego is issuing, with its monthly report, a list of legally qualified practitioners in the city and county of San Diego, from whom only, burial permits can be obtained.

The Physician's Leisure Library.—Mr. George S. Davis announces that he will continue to issue the Physician's Leisure Library during the current year. From the names of authors which appear in the prospectus it is evident that the high standard of the series will be maintained.

An Army Medical Board will be convened in New York City, New York, October 1, 1888, for the examination of such persons as may be properly invited to present themselves before it as candidates for appointment in the medical corps of the army. Application for an invitation should be addressed to the Secretary of War, stating date and place of birth; place and State of permanent residence, and accompanied by certificates, based on personal acquaintance, from at least two persons of repute, as to citizenship, character, and moral habits. Testimonials as to professional standing, from the professors of the medical college from which the applicant graduated, are also desirable. The candidate must be between 21 and 28 years of age, and a graduate from a regular medical college, evidence of which, his diploma, must be submitted to the Board. Further information regarding the examinations, and their nature, may be obtained by addressing the Surgeon General, U. S. Army, Washington, D. C.

THE MEDICAL TIMES will be pleased to receive early intelligence of local events of general medical interest, or of matters which it is desirable to bring to the notice of the profession.

Local papers containing reports or news items should be marked.

Letters, whether written for publication or private information, must be authenticated by the names and addresses of their writers; of course not necessarily for publication.

All communications relating to this journal should be addressed to 429½ J street, Sacramento, Cal.